Occidental Medical Times.

Vol. XII. APRIL, 1898. No. 4.

WHICH SURGEON SHALL WE CHOOSE IN APPENDICITIS?

By J. Henry Barbat, M. D., Adjunct to the Chair of Anatomy, Medical Department, University of California.

Read before the San Francisco County Medical Society.

There is no condition in which the saying that "Nature is a good physician, but a very poor surgeon," is better exemplified than in appendicitis. Take our cases of acute appendicitis and divide them into two general classes—the one in which the disease process is confined to the interior of the appendix, and the other in which the peritoneum is involved. In the former cases, by giving nature a fair chance, administering a laxative and resting the body, the patient is up and around in a few days and cured, as far as that particular attack goes. How different when the disease has extended beyond the confines of the mucous membrane. We no longer have a medical disease to deal with; the condition is one which demands the immediate use of the surgeon's knife, to either save the patient's life, or to avoid the risk of the extremely poor surgery which nature affords.

Note the contrast between the neat work of the abdominal surgeon and the clumsy and chronic surgery of nature. A case presents itself in which a diagnosis of appendicitis is intelligently made; the patient has been sick but a few hours, and the vital forces are in good condition. Let us follow, first, the surgeon in his treatment of the case, and then observe the work of nature. The surgeon prepares for immediate operation, and within 12 to 24 hours from the onset of the disease the patient is practically out of danger. An incision one to two inches long, according to the thickness of the abdominal wall, a blunt separation of the fasciæ and muscles in the respective lines of their fibres and the peritoneum is opened so as to admit one finger. Then the surgeon must determine whether the disease has progressed to such an extent as to require drainage, or whether the appendix can be removed and the abdomen closed. In the vast majority of cases operated on within the first 24 hours, we do not require drainage. In these cases the appendix is brought out through the incision and sufficient cecum drawn out, to enable the operator to control the bowel after the appendix is removed.

One of the best ways to deal with meso-appendix is to apply a narrow clamp parallel with the appendix, the end of the clamp well up against its base. The meso-appendix is then divided, and all vessels sought for and ligated with fine catgut. The clamp is then removed and the cut edge whipped over with the same material. This method is superior to ligation *en masse*, because the cut edges of the peritoneum are turned in and adhesions are prevented.

Those who are provided with Dr. Skene's electro-thermic forceps may save considerable time by using them to clamp the meso-appendix. They save the necessity of both tying the vessels and sewing the peritoneum, and give a perfectly safe result, although more likely to be followed by adhesions than the previous method. Dawbarn's method of inverting the stump is unquestionably the best, when it is feasible. A purse-string stitch of fine catgut is inserted around the base of the appendix, care being taken that it is placed, not on the appendix itself, but on the cecum; this is important, as I have seen operators fail to invert the stump by neglecting this point. After the stitch is inserted the appendix is cut off, either with a cautery knife or a scissors. The end of the stump is seized with a mouse-toothed forceps, and with gentle pressure is inverted into the cecum, and the catgut drawn tight as the forceps are being removed. If this part of the operation is properly performed, the intestine presents the appearance of a congenital absence of the appendix. Deaver advocates cutting the appendix off close to the cecum, and closing the opening in the gut with two rows of fine catgut.

The abdomen is closed as follows: The peritoneum is sewed separately with fine catgut, and if the muscular fibres have not been cut across, it is better not to place any sutures in these tissues, as they tend to produce necrosis and are of no value in retaining the structures in position. The skin is to be approximated by means of an intracutaneous suture of either catgut or silk-wormgut. In ten days to two weeks the patient is able to be up and about.

If, instead of finding that the abdomen may be closed at once, we find infectious material within the abdominal cavity, the incision may be enlarged to facilitate operating and prevent spreading infection. As a rule, it is not necessary to cut through the muscular or aponeurotic structures, except in children; simply enlarging the incision in the skin and peritoneum suffices. Drainage can be safely maintained through the McBurney incision by using a sufficiently firm drainage tube, to prevent the closure of the abdominal opening by the contraction of the muscles. Cases in which an early operation is done, rarely need drainage for more than a few days, when the various planes of muscles assume their natural relation, effectually close the opening and obviate the possibility of hernia.

Let us now turn to a case of acute appendicitis which is left to the tender mercies of "*vis medicatrix naturæ*," and note the difference in the course, duration and result. As I stated before, in mild catarrhal cases a dose of salts is sufficient, but the moment the disease process extends beyond the mucous membrane we have a different condition of affairs. If the extension is slow the great omentum wraps itself around the diseased organ, in order to protect the general peritoneal cavity from infection. This barrier is often efficient to limit the infectious process temporarily, and if the secretion of pus is not too rapid, an abscess is formed, which may do one of several things: It may point in the right inguinal or lumbar region, which is the most favorable termination; it may open into either the bladder or bowel; the pus may find its way upward behind the ascending colon and get to the upper surface of the liver, forming a subdiaphragmatic abscess, which may point in one of the intercostal spaces, if the patient survive long enough. Instead of burrowing upward, we may find the pus passing down into the pelvis, dissecting out the rectum, or getting into the muscles of the venter of the ilium, and producing all the symptoms of a psoas abscess. The abscess may rupture into the peritoneal cavity, with rapidly fatal results. These possibilities are not theoretical, but are taken from reported cases of appendicitis, in which the surgeon had been called too late for an early operation. In any of these terminations the patient is required to remain an invalid from four weeks to a lifetime, and to suffer unlimited pain without having gained the slightest advantage therefor. The vast majority of cases, however, perish before nature is capable of disposing of the offending materials which should never have been allowed to accumulate, or even form, if the surgeon is called in sufficiently early.

We have to admit that cases are met with in which rapid perforation, followed by death, has occurred within five or six hours; but these are unusual and should serve as an incentive to avoid delay and not to postpone operating one minute longer than is absolutely necessary. As a rule, however, perforation does not occur until several hours after the patient is taken sick; and it should be the aim of the medical attendant to forestall nature and to remove the venomous worm before it has had a chance to project its poisonous contents and deal destruction and death to a valued member of the community.

It is the disease and not the operation that is dangerous. The medical men who are against early operation for appendicitis are those who have a mortal fear of opening the peritoneal cavity, because they were taught that it was a very dangerous thing to do and that it is better to wait till the abscess points somewhere and then to open it. Others have done operations involving laparotomy, and having had fatal results on account of their faulty *technique* condemn the whole business.

I must admit that, personally, I would rather trust to "*vis medicatrix naturæ*" than to some of these gentlemen who hold their knives between their teeth, or scratch their heads, in the course of a laparotomy. But in the case of men who are doing clean abdominal surgery, opening the peritoneal cavity is in itself devoid of danger, and if the disease process has not extended beyond the peritoneal coat of the appendix, its removal does not involve any additional risk.

I have never seen a case terminate fatally because of operation. I have seen a great many get well who would undoubtedly have died had they not been operated on. I have seen a great many die because they were not operated on, or because, for one reason or another, the operation was delayed until the system was overwhelmed with the ptomaines absorbed by the infected peritoneum.

803 Sutter street.

SOME REMARKS ON BICYCLING FOR WOMEN.

By Josephine Calahan, M.D., Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

There is, perhaps, no other subject on which physicians differ more widely than the propriety of the bicycle for women. Ours is a progressive profession, willing to accept good from any source. During recent years women have been riding to such an extent, and often with such manifest advantage to health and appearance, that the bicycle can no longer be called a fad. It is, therefore, the duty of physicians to inform themselves upon the subject, that they may intelligently advise, and, in suitable cases, prescribe this form of exercise for their patients.

By experience, as well as by observation, I am convinced that the bicycle may, in selected cases, be of much therapeutic value. It is the abuse, not the proper use of the wheel, that is the cause of so much unfavorable criticism of this most alluring and beneficial of all out-door exercises. That some ride without advantage, and even with harm to themselves, is generally due to the awkwardness and indiscretions consequent upon insufficient or faulty training. They ride too often, too long a distance at one time, in an unsuitable dress, or in a faulty position on an ill-fitting saddle, or when not in proper physical condition for the exercise In this way harm is done, undeserved censure attaches to the wheel, and a delightful recreation is unjustly condemned. It is seldom that an experienced, graceful rider injures herself, or realizes anything but benefit from the exercise. It is, therefore, of the greatest importance that a woman be well taught in the beginning, and an effort should be made to secure the services of a competent and careful teacher, who can advise upon all matters pertaining to the wheel, that she may derive all possible benefit from the exercise and avoid the dangers.

Among other things the teacher should insist that she wear a suitable costume. The average woman presents herself for her first lesson wearing an ordinary street dress, with a long skirt, and in this way many accidents are caused, which are more or less severe in character.

A suitable costume for cycling should be loose about the waist, allowing perfect freedom of motion and respiration; the skirt should be much shorter than that of an ordinary dress; the shoes high, to give support to the ankles, and with low heels. Bloomers without a skirt are ungraceful and unnecessary; they have no excuse for existence, and are only mentioned here to be condemned.

Lessons should not last more than half an hour, as they are generally given on old and badly adjusted wheels, difficult to propel, and prolonged effort under such conditions might do harm. Again, the muscles are tired at the expiration of that time, and nothing is gained by further effort. Immediately following the exercise a warm or hot bath should be taken, and, if agreeable, followed by a cold shower, the body being well rubbed down and the linen changed. In this way muscular soreness is avoided and a feeling of exhilaration and well-being follows. For the bicyclists' colors of black and blue, which are usually assumed with the first lesson, to be worn thereafter for an indefinite time, many remedies are suggested, but perhaps the best of all are hot water and nature's own process of absorption.

Perhaps the most difficult question connected with bicycling is the saddle, for although there are numerous makes, none seem to be entirely satisfactory. There are saddles with a long pommel, those with a short pommel, and others with no pommel whatever. Some are wide and others narrow; some have springs, while others, as the pneumatic, are filled with air, which the manufacturers claim gives greater elasticity. All have their advantages and disadvantages. Perhaps the Christy and the different styles of the Hunt are the best; but no one model will suit all riders, and the only way is to keep trying until a satisfactory one is obtained.

A correct position on the wheel is to be desired, as it is graceful, facilitates steering, gives greater confidence, makes riding easier, and consequently prevents unnecessary waste of muscular and nervous force. It is difficult to define, and most teachers do not give it sufficient attention. A good, general rule is to have the wheel so adjusted that the weight of the body will be evenly divided between the saddle, handle bars and pedals, allowing a third of the weight to each. To accomplish this the saddle should be high enough and far enough back, so that the body will incline slightly forward. The bars should be sufficiently low, and so placed that with the hands grasping them the wrists will be extended and the elbows slightly flexed. The pedal should be so adjusted that when nearest the ground the ankle will be somewhat straightened and the knee slightly bent. A perfectly erect position of the body on the wheel is to be avoided. It is ungraceful and dangerous, as it causes all the weight to come upon the saddle and all jars directly upon the spine. By inclining slightly forward the weight is more evenly distributed, better command of the bars and pedals are obtained and direct jars to the spine and viscera are avoided. An exaggerated leaning forward is dangerous and should not be indulged in.

The advantages to be derived from cycling are numerous. In England, where women are noted for their love of out-door exercise and consequent splendid physique, it is claimed that the health of that nation has been materially improved by the use of the bicycle, and in no other country is it so much used or so popular. That American women suffer from the bad effects of a sedentary life is readily apparent, and what little active out-door exercise they do indulge in, as riding or driving, is rendered less beneficial owing to the restrictions of modern dress.

On the wheel the dress must, of necessity, be loose, allowing perfect freedom—and by its use women have learned how much healthier and more desirable it is to be comfortable. In this way the bicycle has been the means of abolishing tight lacing and heavy skirts to a greater extent than all the arguments of physicians and of dress reformers that the world has ever seen. If the wheel never accomplished anything further than this—and the end is not yet—it would be entitled to the thanks of a grateful humanity.

Again, there is no monotony about bicycling, and inertia does not have to be overcome as in most things; the mind is given a complete rest, as the attention is diverted from everything except the pleasure of the hour. Every muscle is brought into action, and as this exercise must be taken in the open air, more oxygen is inhaled, the blood is thereby enriched, the circulation and respirations are materially increased, and the organs of secretion and excretion encouraged to increased activity.

It is the best of all stimulants for a sluggish liver and an inactive skin, and an ideal remedy for a capricious or indifferent appetite. It stimulates the secreting functions of the stomach as well as its peristaltic action, in common with the rest of the organs of the digestive tract, assisting nature in this respect more naturally and materially than any remedy yet known to our materia medica. By it the stout are made slighter and the thin plump, and when used judiciously improvement in every fibre and in every organ is sure to follow.

It is one of the very best things for insomnia, which, owing to our modern American life, is becoming almost as common as the national ill, dyspepsia, and is about as taxing to the resources of the physician. For obvious reasons the bicycle would not be practicable in all cases of insomnia. In nervous conditions not dependent upon any real pathological lesion, but rather to accumulations of poisonous matter in the blood, whether due to excessive mental effort, without compensating physical relaxation, or to the opposite habit of an inactive, aimless life, systematic exercise on the wheel will be found to meet the conditions admirably.

Not all pathological conditions of the abdominal organs contraindicate the use of the wheel. It will be safe to say that in all conditions which are inflammatory in character, or apt to become so, an exercise as active as cycling is dangerous and should be avoided.

In conclusion, I wish to say that while this paper is a plea for the judicious use of the bicycle for women, I must not be understood as advocating the cause of the so-called "new woman." On the contrary, it is the woman devoted to home life that the wheel should most directly benefit. It is a melancholy truth that so large a percentage of American women suffer from some of the diseases peculiar to their sex, that they are vastly inferior, physically if not mentally, to their mothers and grandmothers.

This lamentable condition of affairs is directly traceable to the baneful effects of modern life and habits. A sound body is the best foundation for a good mental condition, and to maintain this both nutrition and exercise are essential. Fortunately greater interest is being taken in physical development generally, by both physicians and laymen, and, I believe, much improvement may be expected to follow when the bicycle is better understood and used with judgment and moderation.

426½ J street.

MYALGIA AND RHEUMATISM.

By E. B. Robertson, M.D., Jackson, Cal.

Read before the California Northern District Medical Society.

For some years I have contemplated offering to the profession my ideas on the subject of myalgia and rheumatism. These thoughts are offered dogmatically, ignoring all authorities except so far as they conform to my own views. I have consulted all accessible writings—and their name is legion—not one of which to my mind has struck the key-note to the causes, means of diagnosis, or rational treatment of these maladies.

It is denied that myalgias are rheumatic at all; I do not care to cavil about names—it is conditions and not names we are considering; but I shall treat of myalgias as of other rheumatic troubles.

It is my purpose to show that all rheumatisms, whether muscular or articular, are strictly blood diseases, and their causes may be readily determined by chemical and microscopical examination of the urine. It is fairly well understood that the urine is the sewage of the whole system. It consists of water carrying effete matter which has been separated from the blood by the kidneys; consequently, the urine is an index of the condition of the blood.

It matters not whether we have to deal with cephalalgia, torticollis, pleurodynia, the involvement of other voluntary or involuntary muscular tissues, or articular rheumatism, we will find the urine, upon examination, to be abnormal as to its contents. It may be preternaturally surcharged with uric acid, or urates; lactic acid is supposed to exist, but has not been proven. On the other hand, it may be alkaline, and loaded with proto-phosphate of lime (bone earth) which is amorphous under the microscope; perhaps we will find it to contain the bi-phosphates, called earthy phosphates, by Golding Bird, in which case it will be beautifully crystallined. Again, we may find the triple phosphates (ammonio-phosphate of magnesia) showing letter-envelope shaped crystals, or octohedral or dumb-bell shaped crystals of the oxalate of lime, or oxalurates, as well as carbonate of lime, which dissolves readily with effervescence upon the addition of nitric or acetic acid.

These morbid urinary deposits are capable of causing cystitis of the most distressing kind, and it is their presence in the blood which produces rheumatic affections, whether muscular or articular. Upon finding any of these abnormal deposits in a sample of urine, we may naturally conclude that there remains more of a like character in the blood from which the sample was derived, so long as the same train of symptoms continue.

To my mind, it is easy to account for the fact that the heart is frequently involved in rheumatism. The same morbific agent that causes the rheumatism or the cystitis, also causes the cardiac affection. There are two ways in which this may be brought about: First, the stream of morbid blood rushing through the heart irritates its lining membrane, causing endocarditis. Second, the substance of the heart being of non-striated muscular fiber, it is as liable to muscular rheumatism as any other muscular tissue, and even more so, because it performs a greater amount of work proportionately than any other muscle of the body.

Sajous "Annual of the Universal Medical Sciences," issue of 1896, on the treatment of neuralgia and rheumatism, gives us nothing new. All the light it affords is to mention anodynes and salicylates, and to recommend us to search for the cause, without telling us how or where. This is in keeping with nearly all the authorities, that is to say, it is palliative therapy without tangible reasons.

"The first Dr. Warren," says Watson, "when asked what was good for acute rheumatism, answered six weeks." What is the usual treatment for rheumatism? One physician gives salicylate of sodium for all cases of acute or sub-acute rheumatism indiscriminately; another uses large doses of nitrate of potassium; one prefers colchicum; his neighbor employs prophylamine, and still another loads his blunderbuss with fine shot, old iron, nitro-glycerine, and cotton wads, and touches it off by electricity. All are about equally successful; all can show abundant authority for their treatment by referring to Flint, Pepper, Watson, Hartshorn, Ziemssen, or Roberts and others. The time has come for the profession to cut loose from this indefiniteness and to rationalize on the treatment of these affections.

I have no routine treatment applicable to all cases of rheumatism. After attention to the secretions, my antirheumatic prescriptions are guided by the chemical and microscopical examination of the urine. When the urine is restored to its normal condition, the blood from which it is derived is also normal, and nature will soon complete the cure by removing any remaining soreness, whether in the muscles or the articulations. My treatment will be best explained by notes of a few selected cases:

CASE I.—The very first case of acute rheumatism I ever treated was in the Calaveras County Hospital, in 1864, with the consent of Dr. Hoerchner, my preceptor and then County Physician, for the purpose of proving my theory of the disease. The urine being markedly acid and showing on cooling an abundant deposit of lithates, I prescribed a solution consisting of one ounce of bicarbonate of potassium, one fluid ounce of wine of colchicum root, and sufficient water to make eight ounces. I ordered the patient to take one tablespoonful every four hours. At the end of the second day, I found his rheumatism markedly subsiding, but his bowels were running off quite smartly from the effect of the colchicum. I ordered him to continue the medicine, by taking only three doses a day, and the next day but one he died from hypercatharsis. Had I stopped the colchicum after having obtained its characteristic effects, and given an opiate, I would have saved my patient's life; but the continuance of the colchicum resulted fatally. I learned from this case not to push colchicum after it commences its cathartic effect, and I have never killed any others in the same way.

CASE II.—At Copperopolis, August, 1866, Mr. Z——. Symptoms, severe pain in the muscles of the neck and shoulders, still greater suffering in the bladder and urethra, with a muco-purulent discharge. Dr. K. had treated him a month for "clap," the diagnosis being a cruel slander upon Mrs. Z. I found the urine heavily loaded with phosphate of lime (bone earth); prescribed nitro-muriatic acid C. P. 5 minims largely diluted with water, every four hours, carefully washing the mouth with saleratus water after each dose. Convalescent in five days.

CASE III.—I was called in consultation with this same Dr. K., to see Mr. G——, who was suffering intense pain in the lumbar region; was taking a teaspoonful of tincture of guaiacum in milk for rheumatism. Found the urine acid and full of lithates. I advised 30 grain doses of bicarbonate of potassium, in water, every four hours. This was followed by immediate relief. That is to say, just as soon as the lithates disappeared from the urine, the patient was fully relieved of his lumbago.

CASE IV.—August, 1867. Patient, Mr. L. O——. Severe acute rheumatism of large joints, especially the knee and ankles; great precordial distress. He being very strong and plethoric I took 24 ounces of blood from his arm, which afforded immediate relief. I then prescribed 10 grains of calomel and 20 of bicarbonate of soda, divided into three doses, of which he took one every three hours. The urine being acid and showing lithates I gave 30 grains of bicarbonate of potassium, in water, every four hours. Two days later the same Dr. K. was called by the family in consultation. He advised that I should give my patient one teaspoonful of tincture of guaiacum three or four times a day, in milk. I asked him what was the object in giving guaiacum, as the patient was already improving. He replied, "Why, to cure the rheumatism." I did not give the guaiacum, but continued the potassium. The patient recovered very speedily, and died twenty years later with mitral insufficiency and anasarca:

CASE V.—Mrs. J. M. P——. On being called to see the patient, I found her unconscious and with the tongue protruding. Her bowels had not moved for several days. I gave an enema of seven pints of hot soap and water and dislodged great quantities of old hardened feces, soon after which consciousness returned. She told me she had not been free from headache for nine years, although twelve physicians had treated her for headache and "uterine disease." On examination I found the uterus tender, but otherwise normal. The urine was acid and contained lithates. I prescribed 30-grain doses of bicarbonate of potassium every four hours. In forty-eight hours she was free from headache and "uterine disease," and has remained quite well up to the present time.

CASE VI.—Mrs. S—— sent for me as she was suffering from great pain in the womb. I was very sure that it was not a case of abortion, as I had explored her uterus for another reason only a few days before. Finding the urine acid, with lithates, I prescribed 30-grain doses of bicarbonate of potassium, with satisfactory results.

CASE VII.—Mrs. C——. Symptoms similar to last case, but with alkaline urine with earthy phosphates. I prescribed aromatic sulphuric acid in 15 minim doses, in water, every four hours. A speedy convalescence ensued.

CASE VIII.—A. W——. Complained of severe pain in thorax and constant distress in the stomach with intense agony in the bladder. He had been under treatment for two months, the diagnosis being hypochondria caused by indigestion; prognosis insanity. Finding in his urine oxalate of lime in two forms, viz.: octohedral and dumb-bell crystals, I prescribed nitro-muriatic acid in 5-minim doses every four hours. He was convalescent in about five days.

CASE IX.—Willie T——, aged 7 years. Brought to me by his mother twelve years ago, a victim of epilepsy, muscular rheumatism, and valvular disease of the heart. My prognosis was speedy death. I found earthy phosphates in the urine, prescribed nitro-muriatic acid, which was not well borne by the stomach, and changed to aromatic sulphuric acid. His epilepsy and rheumatism soon ceased and his heart improved, and on September 9, 1897, he competed in a bicycle race at Jackson, and won first prize.

In the "American System of Medicine," by Pepper, vol. iv., page 529, 1886, may be seen an article by Dr. B C. Willson, in which he says of myalgia: "This affection has no essential relation to rheumatism, or rheumatic diathesis" Dr. Thomas Watson, in his "Practice of Physic," says that the complication of the heart constitutes the only danger to the life of the patient in cases of acute rheumatism. Now, the heart is wholly muscular, and non-articular, and if we have no muscular rheumatism, what is the matter with the heart in cases of acute articular rheumatism, the involvement of which constitutes the only danger according to Watson, unless the fibrous tissue only be involved. In the *Universal Medical Journal* for September, 1897, I find a lengthy discussion on "arthritis deformans," by the British Medical Association. In that discussion Dr. F. C. Shattuck stated that we still know nothing about the pathogeny of rheumatoid arthritis. It is still (in his opinion) the opprobrium of medicine.

I do not care to bore you by quoting the various opinions expressed on that occasion. Suffice it to say, that all the gentlemen who participated in that discussion regarded the malady as affecting only the joints. Now, rheumatoid arthritis—so called—is primordially produced by blood changes, as are all other forms of rheumatic affections; and, further, the articulations are not necessarily involved in the malady until they are mechanically displaced by the muscular contractions. The tendons, capsular ligaments, and other fibrous tissues concerned in the formation of the joints, are absolutely noncontractile, and have no power within themselves to effect the displacements. Chronic muscular rheumatism, causing continued muscular contraction, displaces the articulations, retaining the bones in their malposition until adhesions and eburnation takes place, thereby establishing permanent deformity. I contend that an early and a correct diagnosis, followed by a rational course of treatment, would save the sufferer not only much agony, but from the terrible affliction of permanent and incurable deformity. I prefer not to *guess* when I have it in my power to *know*. Chemistry, aided by the microscope, can give us such knowledge.

It will be seen by the preceding that rheumatism, like all acute or chronic diseases, cannot be rationally treated by routine. Every case should be carefully investigated as to its cause, and the treatment be guided by the results thereof.

THE OCULAR SYMPTOMS OF TABES DORSALIS.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Read before the California-Northern District Medical Society.

My reason for bringing this subject before the Society for discussion is that the physician in his study of obscure cases often overlooks the condition of the eyes. Careful observation of the ocular symptoms would, not infrequently, enable us to clear up a doubtful diagnosis at a much earlier stage of the trouble than would otherwise be possible. I do not assume to present anything new, but I trust that a classification and review of the knowledge we already possess will not be unacceptable. I will first briefly report a few cases in illustration of this subject:

CASE I—Dr. R. W——, æt. 43 years, had enjoyed good health until six months before consulting me. During that time he suffered from occasional sharp shooting pains in his body or legs, which he had considered to be rheumatic in character. For the preceding eight years the patient had performed the arduous duties of a large country practice, which had necessitated his spending a greater part of his time in driving over rough country roads in all kinds of weather. He denied ever having had syphilis, and no evidence of the disease was present. With the exception of the supposed rheumatic pains, the first symptoms calling attention to any departure from normal health was double vision. The diplopia was found to be due to paresis of the internal rectus muscle of the left eye, and was not noticed when the patient looked to the left. The pupils were unequal in size—the left being 0.5 mm. larger than the right. They reacted slowly to the stimulus of light, but promptly to efforts of accommodation and moderately to mydriatics. The vision of the right eye was $\frac{3}{4}$ and of the left $\frac{2}{3}$ normal, and this was not improved by glasses. He read Jaeger No. 1 with +2.5 D. for the right eye at 25 cm., and No. 2 at the same distance with the left. There was marked anesthesia of the skin in the temporal regions. The visual fields were markedly contracted on all sides. The color field, particularly for green, was considerably smaller than the field for black. The ophthalmoscopic examination revealed slight pallor of the optic discs of both eyes, especially on the temporal sides, but otherwise the media and fundus were healthy. The ocular symptoms pointed so positively to sclerosis of the posterior columns of the spinal cord that the examination was made more general. The patellar tendon reflex was found to be noticeably diminished, and he was unsteady when standing with feet together and closed eyes. The patient was advised to consult another physician, as his ocular symptoms were evidently the manifestation of a general nervous disorder. The patient occasionally came under my observation for the two succeeding years. He rapidly lost what little power of accommodation he had, as was shown by the fact that the strength of his glasses had to be increased frequently. The paralysis of the optic nerves, also, made rapid progress, so that before the end of two years he was obliged to give up all attempts to read. The ataxic symptoms also rapidly increased, and he was soon obliged to have recourse to crutches for locomotion.

CASE II.—J. B——, æt. 38 years, a mechanic, consulted me because his failing vision prevented him from doing his work well. I found his eyes were emetropic, with vision reduced to $\frac{5}{6}$ in each eye. He was able to read Jaeger No. 1 for a short time with +2 D. The pupil responded slowly to light, but acted promptly with efforts at accommodation. Both pupils were small, but the right one was markedly smaller than the left, and it had the appearance of being contracted by a myotic. The optic discs were found to be very pale, and the vessels were smaller than normal. The visual fields were much contracted. Further inquiry elicited the fact that the patient had been very languid and easily tired during the past few months. He had lost all sexual desire. The patellar tendon reflex was entirely abolished, and his gait, with closed eyes, was uncertain and ataxic. This patient had contracted syphilis about ten years previously. He was referred to his family physician, who confirmed my suspicion that the ocular symptoms were secondary to tabes.

CASE III.—G. G——, æt. 46 years, was thrown violently from his carriage. He was confined to his bed for a number of weeks from the effect of the shock and concussion. After being around for two months he noticed lightning pains in various parts of the body and limbs. The pains would last only a few days in one location when he would have freedom from pains for a period of time, when they would reappear in some other part of the body. He consulted me in regard to occasional attacks of diplopia, which did not last long at any time. His pupils were markedly unequal in size and well dilated; they responded to light very slowly, but acted with accommodation. He was unable to see for several minutes after going from a bright to a dim light. The optic discs were normal and the vision remained sufficiently good to enable him to do much reading during the subsequent fifteen years of suffering which he endured. He finally died of a complication directly caused by the nervous disease.

In none of these cases were all of the ocular symptoms which arise from tabes found. Yet in each case enough were observed to call attention to the nerve disease before the general symptoms were sufficiently well marked to indicate the true nature of the trouble. Fortunately, the transitory pathological conditions arising from this disease are much more common than the permanent disturbances and they occur more frequently in the early stages.

The ocular symptoms may be grouped under the following heads:

1. Disturbances of the motor muscles.
2. The pupillary symptoms.
3. Loss of accommodation.
4. Anesthesia of the cornea and skin of the temples.
5. Paralysis of the external muscles.
6. Contraction of the visual field.
7. Atrophy of the optic nerve.

Disturbances in the motor muscles of the eyes play an important part in the clinical history of tabes. It is a rule, with few exceptions, that the motor muscular troubles subside before atrophy of the optic nerve comes on. The diplopia is usually transitory and noticed only in the early stages of the disease. Permanent muscular paralysis does, however, occasionally occur.

The pupillary symptoms are of great diagnostic value. The most characteristic condition is that known as the Argyl-Robertson pupil or reflex iridoplegia. The pupillary reflexes are abolished, but the normal relations between the pupil and accommodation are preserved. The pupils do not change when light is suddenly thrown into the eye, but the size of the pupil varies in looking from a distant to a near object.

Inequality in the size of the pupils is another common symptom of tabes. In certain stages the pupils may be markedly dilated, but in others—usually the later—they are very much contracted. The pupils act feebly to mydriatics A tremulous condition of the pupillary border of the iris has been occasionally noticed.

Paralysis of the accommodation is one of the rather constant eye complications. Anesthesia of the cornea and of the skin of the temples are observed with considerable frequency. Paralysis of the external muscles is found occasionally. Ptosis and paralysis of the sixth nerve are not very uncommon.

The changes in the visual field are more or less characteristic. The color field is the first to be contracted, and green generally disappears first, then yellow and blue. It is noticeable that the contraction of the field is usually concentric to the blind spot and not to the yellow spot. The limitations of the field are well defined, but irregular. It has been pointed out that much contraction of the color field indicates a rapidly progressing case, and also that the contraction of the field keeps pace with the atrophy of the optic nerve.

Optic nerve complication is common, and is the one most to be dreaded, as it usually leads, sooner or later, to blindness. Charcot has stated that as many as 90 per cent. of the so-called idiopathic cases of atrophy of the optic nerve are due to tabes. He claims that the optic nerve changes may occur years before the other manifestations of spinal sclerosis are evident. The optic nerve atrophy of tabes always leads to serious diminution of vision, if not to total blindness.

429 J street.

THE TREATMENT OF PLACENTA PREVIA BY EARLY FORCEPS APPLICATION INSTEAD OF VERSION AND WITHOUT TAMPONING.

By I. S. Eshleman, M.D., Fresno, Cal.

Read before the San Joaquin Valley Medical Society.

I am aware that my views and methods in the treatment of these important cases run counter to the long established practice. Early in my professional career I took exception to version and adopted the forceps and anesthetics as the preferable method. Statistics show that under version in this condition one-third of the mothers and two-thirds of the infants are lost. Years ago I have discussed this subject sufficiently before Philadelphia medical societies and published enough regarding it in Philadelphia medical journals to have introduced it more widely had obstetricians more generally comprehended and tested the process. It is, however, always difficult to get out of routine practice and to adopt an innovation.

How shall we better our statistics? The remedy lies in abandoning version and the appliances that version requires and which lead to hemorrhage, inflammation, and sepsis. We must abandon the *accouchment forcé* and follow the teachings of nature. The os must be respected; it yields kindly to the incoming pressure in response, but it cannot be coerced without resentment. It is during this conflict with the os that sepsis results.

At the outset I must object to the tampon and the various means commonly used for arresting hemorrhage and dilating the os. A rigid os is not to be expected unless the os has been tampered with, and this condition is not compatible with hemorrhage. Our fathers employed venesection to relax the os and we have enough bleeding in placenta previa to accomplish that purpose.

In cases of placenta previa we do not desire dilatation at the beginning of labor. The os will not dilate until there is an object in dilatation. Its nature is to retain and not to permit the escape of the uterine contents prematurely. It therefore waits for the fetus to present. The os expands in harmony with the fundus, and, as the latter contracts. Dilating and tamponing reverses nature's process. It bruises and irritates the uterus, producing hemorrhage and causing directly rigidity of the os. In placenta previa where tamponing has not been resorted to, flaccidity of the os is the rule, so that at first one finger and then a second will enter without artificial dilatation. Labor pains cannot be expected where much hemorrhage has occurred.

In *accouchment forcé*, it is, usually, at this stage that the hand is passed into the uterus in an effort to grasp the child's feet. This accomplished, it remains, in turning, to force the long diameter of the child through the short diameter of the uterus, a process that nature never contemplated or the uterus would have been globular instead of pear-shaped. These cases are usually premature. The uterus, therefore, is not matured for natural delivery and much less so for forcible procedure.

The "American Text-book of Obstetrics" adduces one author who advocates thorough packing of the vagina with "a hat full" of charpie. This, if effectively done, will prevent any external hemorrhage and is allowed to remain until expelled with the child! When would such delivery take place and what would result to two lives? On removing the tampon or dilator, what is the condition of things? Extensive separation of the placenta with its attendant hemorrhage. This is a concealed hemorrhage, for if the tamponing has been effective the blood will accumulate in the uterine cavity, which is capable of holding a large quantity of fluid in addition to its contents. We will also probably find that during the time this tampon has been in place, feeble pains, aided by the tampon or dilator and the placental mass, have displaced the head to one side of the pelvic brim so that a shoulder or the side presents and rupture may occur. This displacement is often caused by the placenta alone, in delayed cases, but it is quite as amenable to restoration as is the bringing down of the feet by version.

The "American Text-book of Obstetrics" enumerates the dangers to the mother by version, as follows: "Rupture of the uterus, shock, increased risk of sepsis, hemorrhage, laceration. To the child, fracture of the humerus as well as the usual risks of breech presentations." Payjot, referring to version, says: "The mother must not be in the greatest danger for, in such cases, version cannot save her. The child is likely to be so weak as certainly to die during the process of turning and extraction. * * * The cervix must admit the ready passage of the head—large enough to allow a closed fist to pass—three and a half inches in diameter. There is no more annoying obstruction than to find the after-coming head firmly retained by a powerful indiarubber-like band about the neck."

This author is the first that I have observed who makes a partial concession to the method of treating placenta previa that I have advised, namely, early pressure upon the bleeding orifices of the uterus by the child through the medium of the legs and breech, then waiting for dilatation. This is correct, but he applies it only to the footling, a rare presentation, unless artificially produced by version. Several authors also advocate a partial use of the process I have suggested without apparently knowing whence the idea was derived.

Barnes advises circumferential separation of the placenta by the finger, as far as it can reach, this being undertaken as soon as the os would admit the fingers. The case is then left to nature. Should dilatation not ensue, he employs the air or water bags, known by his name, and then delivers with forceps. Detachment in this manner must produce hemorrhage, and hemorrhage relaxation, and together they compromise the life of the child. According to Dr. Barnes' statistics, the mortality of the mothers is reduced to 8.8 per cent., while that of the children rises as high as 67 per cent. The Barnes' dilators follow nature more closely than the tampon, but they do not favor that retraction of the inferior zone of the uterus which should take place, and they also tend to displace the head, already inclined to one side by the placental mass.

All these appliances keep up irritation when the uterus and the patient want rest and the greatest quietude. The less interference the less hemorrhage, because of the fewer pains. Meanwhile relaxation of the os and inferior segment of the uterus should progress without material disturbance of the placental site, while slight hemorrhage is aiding relaxation.

My experience with this alarming complication comprises only six cases, in which the following method of delivery was adopted: A diagnosis of placenta previa, either marginal or complete, having been made, I do not tampon or irritate the os in any way, but enjoin rest and quietude, especially if the labor be premature, at the same time keeping the case under close observation. If labor is imminent, bleeding will accompany the preliminary contractions and dilatations. This bleeding acts in the same manner as venesection, relaxing the os which soon becomes patulous. In due time I am able easily to introduce two fingers and find the os dilatable. Search is then made for the free edge of the placenta, or if not already detached, separation is effected on that side. If the placenta be centrally located, I make an opening through the mass. Its structure is such that it can be bored through carefully, the membranes only requiring puncturing. A placental or speculum forceps is then introduced and opened so as to make a sufficient aperture for the passage of the obstetric forceps. The blades are then introduced along the free margin of the placenta or through the artificial opening in its center. An assistant makes pressure on the fundus so as to enable the blades to grasp the head, which is next brought down firmly upon the os and placenta, or wedged between the placenta and the opposite uterine wall. This done, the separated placental site is tamponed by the child's head, while the placenta is supported in its attachment as by a splint. By this means the head is brought in line with the os instead of being pressed to one side by the placenta. All hemorrhage is now ended and labor may take its course, or if the condition of the mother or the child admits, it may be artificially terminated with the greatest ease, so complete is the relaxation of the os attendant upon the usual hemorrhage.

I have, in this manner, delivered through an aperture in the placenta without detaching its circumference. This placenta when detached, after delivery, was found to be unbroken, except the aperture in its center. The mother in this case did well, although she had been bleeding for a day in the country and had traveled by wagon, eight miles to town, bleeding by the way. In five similar cases with more or less complete central implantation, of which I have the records, all the mothers were saved. One of these died subsequent to an easy and safe delivery, from "heart clot" due to suddenly sitting up in bed, shortly after labor had terminated. All the viable children found alive were saved.

The danger to the mother, in placenta previa, is not so much from loss of blood as from rupture of the uterus, metritis, peritonitis, and sepsis. The placental site of the uterus, wherever located, does not contract prematurely or during labor, else we would have but few children born alive. The inferior zone and the neck of the uterus must dilate. Dilatation here disturbs the placental site quite as much as would the contractions, were it located at the fundus, but the placenta, wherever located, acts as a splint, preventing undue contraction or expansion at its site—the latter less perfectly as it is less natural; hence partial separation and the attendant hemorrhage. The placental site requires support when subjected to expansion and retraction of the cervix and cervical zone. Dilatation occurs in these cases largely at the expense of the free walls of the canal. Taking these lessons, from the uterus we may, in placenta previa, deliver with the forceps, viable children without damage to the mother or to the child.

On January 13, 1875, I reported the following case to the Philadelphia County Medical Society. It was subsequently published in the *Philadelphia Medical Times*, March 20, 1875, from which I make the following quotations: The case was seen in consultation with Dr. McGuigan. The os would scarcely admit the fingers and was from one and a quarter to one and a half inches in diameter. The forceps were at once applied and the head brought down firmly upon the placenta, compressing the uterine sinuses and instantly arresting the bleeding. The forefinger of the left hand was interposed between the head and the inner surface of the os to estimate the amount of force applied by the forceps, held in the other hand, traction being aided by the uterine efforts. The case was conducted gently, in imitation of nature, and was terminated in about an hour. There was no perceptible loss of blood during the delivery and no concealed or *post-partem* hemorrhage. The child soon rallied and lived, being at full term. The uterus contracted gently upon the placenta, a portion of which remained adherent near the os, the remainder protruding from the uterus in a somewhat crushed condition, yet there was no hemorrhage. I remarked that I was not aware that any one had previously advocated the early application of the forceps for the purpose of arresting the hemorrhage by the pressure of the child's head, and also for dilating the os in the same manner as in natural labor.

Dr. Goodell asked if the membranes had been ruptured. I replied that they were, upon my arrival. Dr. Goodell then asked me to explain how the os was made to admit the forceps. I replied that while the diameter of the os was less than the width of the blades, it was possible, in the absence of pains, to elevate the head, when the blade of the forceps would elongate the circular opening into one of button-hole shape, so as to admit its passage; the second blade being somewhat narrower would pass over the shank of the first and enter the aperture. It is surprising to find how small an opening will admit the forceps, and, equally so, how large an opening is required to admit the hand.

Dr. McGuigan, who was present, stated that he had been called to see the patient the day but one prior to her delivery. He found blood issuing from the vagina. She had lost a previous pregnancy through hemorrhage. The cervix was then three-quarters of an inch in length and he could feel the membranes. Two days later he found her again bleeding, but in labor. The os was dilated to about three-quarters of an inch and the membranes were intact. The placenta could be felt three-quarters of an inch from the external os, on the left side, and detached, for a space of two inches. The pains were rapid and forcible. The head was not engaged. He ruptured the membranes when the pains became feeble and slow. The bleeding had not been continuous during the two days mentioned.

This case verifies the statement that hemorrhage is not the great danger where the case is closely watched, the uterus not interfered with, and the forceps applied before the os is fully dilated.

In 1876, Dr. R. Davis, of Wilkesbarre, Pa., read a paper before the State Medical Society, then in session at Philadelphia, from which I quote, as follows, "I shall inquire by what title the dangerous operation of turning holds the prominent position which it does in the methods of treatment generally recommended by obstetrical authorities even at this day. I offer some considerations to sustain the proposition which I make, namely, that more lives, both of mothers and of children would be saved if every case of placenta previa in which the head presents were conducted with the view of finally delivering by the head rather than by the feet."

He says: "I have collected the histories of 28 cases of placenta previa. The majority of these cases occurred in my own practice and in that of my neighbors, in Wilkesbarre. Six occurred in the practice of Dr. Thomas, of New York, and 6 in that of Dr. Eshleman, of Philadelphia. One of Dr. Thomas' patients died of *post-partem* hemorrhage, artificial extraction having been practised in this case four hours previous to the birth of the child. One of Dr. Eshleman's patients died from "heart clot" from sitting up in bed, after safe delivery by the forceps. All the remaining 26 cases recovered. Of the children, 12 of the 28 were born alive. Of the 16 children still-born, at least 4 were non-viable. The conditions as to non-viability in 4 more, were unknown. In only 8 cases in which the period of viability was known to have been reached were the children still-born. In two of these cases the placenta was extracted several hours before delivery. In 1 the cranium had to be punctured. In the remaining 5 cases death is supposed to have been caused by extensive detachment and its consequent hemorrhage. The history of these cases shows that 26 of them were complete and only 2 partial. These 2 were attended with the usual hemorrhage. "To Dr. I. S. Eshleman, of this city (Philadelphia), belongs the credit, as far as I have been able to ascertain, of having first applied the narrow bladed forceps in placenta previa, through an os dilated to the extent of only one and a half inches, for the double purpose of producing dilatation of the os and making pressure with the head upon the placenta and vessels to prevent hemorrhage."

"Two cases thus treated by him were published in the *Philadelphia Medical Times* of March 20th, and August 14, 1875. In one case a living child was delivered, in the other the forceps were applied through an opening made in the placenta, centrally over the os. In both cases he was eminently successful in causing the os to dilate and in completely controlling the hemorrhage. May I not predict that by this operation there has been opened a new era in the treatment of placenta previa? It seems hardly to be doubted that when the instrument has been accurately adjusted and gentle traction made upon it that the head will so effectually tampon the os as to make any considerable hemorrhage impossible. Such a proceeding, it must be believed, will be attended with less pain and will be less likely to produce shock or other serious after consequences, than turning, as ordinarily performed, while the chances of delivering a living child must be greatly increased. Of the 28 cases of head-first delivery,

already referred to, in 15 the forceps were used, with only one death, that being from "heart clot" induced by imprudence after delivery. In all of these the instrument was applied before full dilatation had occurred. Six children out of 15 were born alive, and at least 3 of the remainder were non-viable. In only 3 cases was there a failure to deliver living children where the period of viability is positively known to have been reached, and in 1 of these, craniotomy had to be performed."

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M.D., Sacramento, Cal., and
WM. FITCH CHENEY, B.A., M.D., Adjunct to the Chair of Obstetrics and Diseases of Women and Children, Cooper Medical College, San Francisco, Cal.

Twenty-nine Consecutive Intubations for Diphtheritic Croup, with Twenty-seven Recoveries, all Treated with Antitoxin.—DR. F. E. WAXHAM, of Denver, gives the following summary of his results: All the cases were seen in consultation, and in all cases the operation was urgently required. Three were under two years of age, with two recoveries, or 66⅔ per cent. Eight were two years old, with eight recoveries, or 100 per cent. Six were three years old, with six recoveries, or 100 per cent. Six were four years old, with five recoveries, or 83⅓ per cent. Two were five years old, with two recoveries, or 100 per cent., and four were six years old, with four recoveries, or 100 per cent. Total, twenty-nine cases, with twenty-seven recoveries, or 93.1 per cent., a mortality of only 6.9 per cent. This great reduction in mortality is to be attributed to the full and free use of antitoxin in all the cases.—*Archives of Pediatrics.*

Apparent Death from Post-partem Hemorrhage.—GIMBERT, of Cannes (*Gaz. Hebdom*), records a case in which, on his arrival at the bedside, he found the child born and hemorrhage going on; in a vessel there was a liter and a half of blood, and the bed was soaked. The inert uterus reached to the umbilicus; the pulse could hardly be felt. It was 8:30 A. M. With one hand the aorta was compressed; with the other towels soaked in boiling water were rubbed on the abdomen; ergotin was injected, stimulants were given to drink. The uterus rapidly contracted, and the placenta was delivered, accompanied by a fresh gush of blood. But the loss of blood, estimated at three liters, was too much, and the patient sank, with all the signs of apparent death. Instantly the body and head seemed to shrink; the skin was cold as a corpse. No heart beats, pulse, respiration, nor reflex of any kind could be detected. Straightway the patient was placed across the bed, head low on the nurse's knees; direct insufflation of air, from mouth to mouth, with rhythmic traction of the tongue was practised; hot applications were made to the chest. There was no effect at all. There was at hand a pan of filtered and boiled water holding 300 g.; into this 3 g. of salt were thrown, and a syringeful (20 c.cm.) was injected into one thigh, while stimulation was continued. No result. It was 9:10 A. M. A similar injection was made into the other thigh. After a third injection (60 c.cm. in all), the patient made a little sound; still the heart gave no sign. A fourth injection was made, after which a little fluttering was felt in the right radial artery; some facial contractions and a conjunctival reflex appeared, and attempts at inspiration commenced. Very hot coffee, bouillon, and cognac were slowly given by the mouth; the heart beats could be heard, the breathing became better, the skin warmer. It was a quarter to 10. At 11 A. M. resuscitation was assured. At 3 P. M. the patient could be left. The eventual recovery was satisfactory. The author, in commenting on the case, discusses the part played by the subcutaneous injection of serum, to which he attributes the resuscitation of the patient, for rhythmical traction of the tongue, insufflation of air, and stimulation of reflexes were unavailing until after the injections. He used this method rather than venous transfusion partly because more immediately applicable, partly because salt solution injected under the skin gets mixed with blood before it reaches the heart, instead of arriving there as salt solution; and partly because intravenous injection has too sudden an action, causing sometimes a dangerous reaction and even toxic symptoms.—*British Medical Journal.*

Suckling and the Typhoid Bacillus.—TALAMON and CASTAIGNE (*L'Obstétrique*), observed two cases of typhoid fever in women suckling their infants. The first patient had been delivered three months when the fever set in. The milk and the blood exhibited clearly the agglutinative properties of Eberth's bacillus. The blood of the suckling did not agglutinate. The second mother was taken ill with typhoid fever four months after delivery. The agglutinative power in the blood and milk was very strong. The infant had suffered for a month from severe gastro-intestinal disturbance. Then its blood was found to agglutinate, and it was weaned. The agglutinative power diminished, and at length disappeared. The child was again put to the breast, and very soon its blood again agglutinated the bacillus of Eberth. Talamon and Castaigne believe that the intestinal irritation in the case of this infant was not an effect, but rather the cause, of the agglutinative principle being passed with unusual ease and rapidity into the circulation —*British Medical Journal.*

Metritis Dissecans in Childbed.—BECKMAN (*Vratch*) reports two cases. A primipara, aged 23, became infected during delivery and died on the sixth day. There was purulent peritonitis; typical emdometritis dissecans was also detected, with a sphacelated area as wide as a crown-piece, which became detached during examination, displaying a perforation. The second patient was also a primipara, aged 29. Basiotripsy had to be performed, and the patient was infected during labor. On the twenty-sixth day the uterus expelled a piece of its mucosa 5 inches long, triangular, and 3½ inches wide at its base; next day another piece 1½ inches long came away. The temperature, which had been high, fell, and the patient made a rapid recovery.—*British Medical Journal.*

SURGERY AND ANATOMY.

BY T. W. HUNTINGTON, B.A., M.D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal., and

GEO. B. SOMERS, M.D., San Francisco, Cal.

Mechanism of Absorption in the Peritoneal Cavity.—MUSCATELLO found that beneath the peritoneal endothelium of the diaphragm and between the connective tissue fibers are open spaces 4 to 16 mm. in diameter, occurring in groups of 50 or 60, which communicate with the lymph vessels. A careful search for these spaces failed to reveal them in any other portion of the peritoneum. Experiments on animals have proved that the peritoneum is capable of absorbing the most remarkable quantities of fluids in a short space of time (the equivalent of the animal's entire weight in twenty-four hours), and also the existence of an intraperitoneal current which carries fluids and small particles towards the diaphragm, regardless of the posture of the animal experimented on. The rate of transmission of these particles from the peritoneal cavity to their ultimate repository, the lymph glands, can, however, be increased or retarded by the influence of gravity.—*Annals of Gynecology and Pediatry*, January, 1898.

Operation in Intestinal Obstruction.—The symptom of stercoraceous vomiting is of great importance, and it was upon it that SIR BENJAMIN RICHARDSON answered his own question when he said: "Is there any single symptom which, being present, says at once and imperatively in cases of acute obstruction of the intestinal canal, now is the time—whatever may be the diagnosis of the case—now is the time to operate? I answer there is such a symptom, and the symptom I refer to is that of stercoraceous vomiting."—*Dublin Journal of Medical Science*, December, 1897.

Postural Method of Draining the Peritoneal Cavity.—At the conclusion of an operation all fluids and debris should be removed as far as possible by sponges, after which the abdominal cavity should be thoroughly irrigated with normal salt solution until the fluid comes away clear. When the irrigation fluid is all sponged out, 500 to 1,000 c.c. of salt solution should be poured into the peritoneal cavity, so that when the patient is elevated, after she is returned to the ward, the artificial current may be started at once towards the diaphragm, thus supplementing the normal current. After the introduction of the salt solution, the omentum and intestines should be replaced in an orderly way and the abdomen closed. As soon as the patient is returned to her room the foot of the bed should be elevated about 20 degrees (18 inches), which gives sufficient inclination of the posterior pelvic wall to assist the flow towards the general peritoneal cavity This posture should be maintained from twenty-four to thirty-six hours, after which the bed may be leveled.—*Annals of Gynecology and Pediatry*, January, 1898.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Intubation in Chronic Stenosis of the Larynx.—DR R. BRYSON DELAVAN quotes O'Dwyer's rules and indications for the performance of tracheotomy in chronic laryngeal stenosis, as follows: (1) Cicatricial stenosis, due to injury to the soft parts from syphilis, irritants, and traumatism. (2) Narrowing of the space both below and above the vocal bands from the products of chronic inflammation—simple, tuberculous, specific, malignant, or otherwise, and including such conditions as the so-called pachydermia laryngis, and corditis vocalis inferior hypertrophica. (3) It is especially valuable in cases in which tracheotomy has been performed, and, when the tracheal canula having been worn for a considerable length of time, the upper part of the trachea is filled with granulations and the laryngeal muscles have become weakened from disease. In this condition intubation has effected many brilliant cures. (4) In papilloma of the larynx it has been found helpful in a fair proportion of cases, although its results in this disease are less satisfactory than in most others in which it has been employed. (5) The rare condition known as web the larynx, hitherto very difficult of removal, but easily cured by the use of a tube for a few

days. (6) Deformities of the larynx from injury or disease of its cartilaginous framework, which have resulted in constriction of the caliber of the organ, have been cured by it. (7) It has also been used, with excellent results, in anchylosis of the crico-arytenoid articulations, and in arthritis deformans of the same part. (8) It is useful in various affections of the nerves of the larynx; for instance, in bilateral of the abductors, and in hysterical contraction of the abductors, "aphonia spastica."

Laryngeal Necrosis in Enteric Fever.—SIR GEORGE DUFFEY, in a paper on laryngeal necrosis in enteric fever, says, that although there is no positive proof that the laryngeal complication is directly due to the typhoid bacillus, still, from the history of the cases, it is reasonable to conclude that bacilli are the cause of the local trouble. The author reported two cases of abscess of the larynx which occurred during the progress of the general disease. Tracheotomy was not performed in either case and both terminated fatally. At the *post-mortem* examinations, abscess of the larynx was found in each case. The cartilage beneath the abscess cavities was found eroded and rough, but there was no laryngeal ulceration. The perichondrum was greatly swollen and separated from the cartilage.—*Dublin Journal of Medical Science*, March, 1898.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

Increase of Baldness.—The *Medical Press and Circular* says: Those who frequent public meetings must have had their attention drawn to the increasing number of bald pates among the audience on the benches during the last twenty years. Previously to this period one observed a large proportion of gray or white-haired heads in congregations or meetings, but these seem somehow to have disappeared, and the bald pates have gradually taken their place. It is to be hoped that this is not a sign of the bare head becoming hereditary in the youth and manhood of the age, and that wigs will not again come into vogue as in olden times. This precocious decay of the hair at the present day may be due to the prevailing fashion of short cropping the head of boys and adults, since baldness is comparatively rare in women, whose hair is not cropped short even as girls. The explanation of this decay, which seems to be irremediable in maturing age, is probably due to the young hairs being deprived of the shelter and warmth necessary to their young vitality, and they consequently suffer from exposure. Only the stronger hairs can survive this exposure to the weather, and even this is becoming stunted in growth, owing to its being frequently cropped short. A like process goes on in meadow and cornfields, where the coarser stubble and straw and grass allow the growth among them of fine grass, weeds, and flowers, which would perish if left without any such shelter. A correspondent observes that on visiting the old society rooms in a large provincial city, he had occasion to look over a large collection of portraits and groups of past members, and he could not but notice the finer heads of hair in the older ones, and the gradual appearance of short cropped hair and bald pates in increasing numbers among the later members. We generally associate bald heads with the legal profession, where their prevalence has been ascribed to the custom of wearing wigs, thus necessitating the hair being cut short to allow of the adornment. Its appearance in the medical profession seems to be of recent advent, and it probably will, in due time, lead to doctors wearing wigs like their medieval ancestors. It is possible that deterioration of, or risk to, health may result from shortness of hair or complete baldness, by the exposed scalp being deprived of its natural covering and armor, shielding it against cold draughts and vitiated air laden with microbes. These facts suggest the desirability of making inquiry whether such individuals are not more liable to diseases of the influenza type than persons possessed of a good substantial head of hair. Doubtless, some share in the capillary denudation must be accorded to the use of hard-rimmed hats, which interfere with the circulation in the scalp and starve the hairs of nourishment, but this cannot be the only, or even the most important factor.

Ascitic Fluid in Syphilis.—JULLIEN (*Sem. Méd.*), reports on two cases of secondary syphilis treated by him with subcutaneous injections of ascitic fluid taken with every aseptic precaution from a syphilitic patient. The first patient received 93 c.cm. of the fluid in fifteen injections without any unfavorable symptom, local or general. No good result ensued. The second patient came under treatment for a roseolous rash. Between July 10th and August 30th she received 520 gm. of the fluid in fifty-seven injections. The only symptom was a slight local edema following a 40-gm. dose. The result of the treatment was altogether comparable to that of a regular mercurial course. The patient's weight increased 58 killogrammes in four months, and symptoms quickly disappeared. In January the patient left the hospital free from all signs of disease. From first to last she had no mercury whatever, and no bad symptom with the exception of a slight arthritis.—*British Medical Journal.*

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M.A., M.B., C.M., Professor of Clinical Medicine, University of California, San Francisco.

Adonis Vernalis in Epilepsy.—TEKUTIEW recorded the case of a boy, aged 10 years, who had suffered from severe epilepsy for two years. The fits occurred fifteen to twenty times a day, and there was commencing mental degeneration. A mixture of infusion of adonis vernalis with some codeine and sodium bromide was given, and the dose of adonis vernalis subsequently increased. The result was most successful; the attacks of epilepsy gradually diminished, and before the patient left the hospital had ceased altogether. The treatment by adonis vernalis was strongly recommended by Bechterew, who combined it with bromides, and found that some cases of epilepsy seemed to be permanently cured by it.—*British Medical Journal.*

Bloodletting, Blisters, and Emetics.—A. ROBIN, after remarking on the almost total neglect of some of the older methods of treatment, gives his investigations into their actions: (1) *Bleeding* has been almost abandoned, since its action is supposed to be mechanical in modifying the blood pressure or getting rid of some poison contained in the blood evacuated, and, therefore, too temporary to be of much good. When one considers its action on nutrition, however, new indications for its use are found: (*a*) Action on nutrition. The author and Binet find that a moderate bleeding (150 to 250 g.) in an acute disease, such as pneumonia, increases nitrogenous metabolism, favors the formation of its end products by oxidation, and stimulates the chemical changes which take place in the nervous system. The same effects are seen in bleeding for uremia or morbus cordis, and in pathological hemorrhages such as hematemesis. (*b*) On respiration. Bloodletting (and menstruation) increases the respiratory changes in every detail to a certain extent in proportion to the amount of blood lost. The oxygen absorbed, urea, and the coefficient of nitrogenous oxidation, are all increased. The indications for its use are, therefore: (1) For its temporary effect on the blood pressure, in cardiac syncope, acute edema of the lungs, and cerebral hemorrhage; (2) where nutritive action is insufficient, as shown by the lowering of the respiratory changes, the percentage of urea, and coefficients of oxidation; (3) in some infective diseases when the symptoms are caused by bacterial toxines, which can be got rid of in two ways, either by excretion or by oxidation, which latter converts them into a harmless soluble product; (4) in some autointoxications, such as uremia, venesection acts not so much by subtracting a certain quantity of the poison with the blood, as by oxidizing the poison into a harmless soluble product. (2) *Emetics.* The author finds that besides clearing the bronchi, emetics, like venesection, increase oxidation. The gaseous changes in respiration are increased in every detail, this action being partly mechanical, a larger quantity of air passing in and out, and partly vital, there being a greater amount of oxygen absorbed and more carbonic acid given out per volume of expired air. Emetics are of the same value in infective bronchitis as purgatives in intestinal infections, while there are few contraindications. (3) *Blisters.* Blisters are useful for their revulsive and derivative properties, and because they increase phagocytosis. Besides this, Robin finds that they increase the amount of air passing through the lungs in a given time to such an extent that the oxygen absorbed may be doubled. There are contraindications, such as albuminuria; otherwise blisters are of great value in acute or chronic pulmonary complaints. *British Medical Journal.*

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M.D., Professor of Pathology, Cooper Medical College, San Francisco.

Inflammation and Repair.—W. WATSON CHEYNE, in his address at the opening of the Section of Pathology of the British Medical Association, at Montreal, discussed this subject as follows: "The tendency now appears to be to regard inflammation as the natural effort at repair after injury. At one time this was the view held by surgeons, and the doctrine was that inflammation was essential to healing, and in the description of healing by first intention, it was stated that a red blush occurred around the wound, not so severe, however, as where suppuration takes place, and that without this red blush, the edges did not adhere. When antiseptic treatment was introduced, it became evident that no inflammatory blush or other sign of inflammation was necessary for healing by first intention; in fact, it was found that wounds healed best when no visible sign of inflammation was present. I have, therefore, always taught that inflammation and healing are two different, and, indeed, to some extent, antagonistic processes, and that, although in every wound the tissues, in resenting the injury, show the early stage of inflammation, yet if no organisms be admitted, the inflammatory phenomena soon pass off, and where there is destruction of tissue, a second process, namely, that of repair, begins. I still look on inflammation as the mechanism which gets rid of the noxious agents, or neutralizes their effects, and on the healing process, as that which repairs defects, whether they are caused by injury or associated with inflammation or not. In fact, inflammation must be followed by repair if recovery is to take place, but repair need not be preceded by inflammation. The difficulty arises from the close association of the two processes, both of which have to do with the growth of cells, and from the fact that repair follows as soon as the inflammation begins to subside. Hence, under the microscope, except in cases of acute suppurative inflammation, one sees the two processes side by side, and it is not a matter of surprise that they should be confounded."—*Western Medical and Surgical Gazette*, December, 1897.

The Syndrome of Chronic Arthritis Deformans.—DR. F. BARJON (*Gazette des Hôpitaux*) concludes a paper with the above title, as follows: (1) Debility, predisposition, and heredity, together with various pathogenic influences, develop rheumatism, either acute articular rheumatism, or pseudo-rheumatism, such as that resulting from the different infectious diseases—gonorrhea, scarlatina, tuberculosis, diphtheria, etc. In any case it does not seem to depend upon a primitive lesion of the nerve centers. (2) In these diverse chronic manifestations, there is a clinical syndrome, always the same, evolving three periods—articular, neurotrophic, myelopathic—always accompanied by essentially the same anatomical lesions of the articulations and bony extremities; and having constantly the same urosemeiographic curve. (3) The distinction actually established between the affection called "true rheumatism" and the "pseudo-rheumatism," should be considered as provisory. It is destined to disappear with the more accurate determination of the causes of each rheumatic process, and the conditions which vary the ulterior evolution of this same process. (4) The X-rays may be very useful in differentiating anatomical lesions created by the chronic rheumatismal syndroma and those of other deforming joint diseases, such as gout and nervous affections.—*Medical Record*, January 15, 1898

Role of the Giant Cells.—A. PUGLIESE (*Fortschritte der Medicin*) says: The blood-forming organs of many animals contain giant cells. It has been claimed that red blood corpuscles arise from their nuclei. The author showed that extirpation of the spleen brought about an increase of the white blood corpuscles. Induced hemorrhage has the same result. The animals experimented upon showed a great increase in the giant cells, sometimes in the spleen, sometimes more marked in the red marrow after these operations. The nuclei were seen in active divisions. The protoplasm of the cells disappeared and left fragments of their nuclei as free elements in the spleen and marrow. These bodies possessed the staining reactions of the ordinary mononuclear cells of the hematopoietic organs. The author thinks he can conclude, therefore, that the leucocytes come from the nuclei of the giant cells.—*Columbus Medical Journal*, February 1, 1898.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M.D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

Epileptic Auras and Constant Signs of Epilepsy.—DR. M. J. DURAND, of Paris, finds aura present in 71 per cent. of epileptics, and is a little more frequent in woman than in man. The aura is constant in 92.9 per cent. of these cases; simple in 52 per cent., and complex in 48 per cent. The aura is considered to have a central origin, and its localization may sometimes indicate its epileptogenic lesion. Attempts to control the occurrence of fits by interrupting the course of the aura have given very uncertain results; but when the aura is constant and invariable the prognosis is less bad, and if sufficiently long, will sometimes allow him to attend to his business Drs. Mairet and Vires read a paper last year before the French Academy of Medicine, in which they reported the results of their investigations into the existence of certain pathognomonic signs of epilepsy in all its forms, especially the convulsive and larval. Pathognomonic signs are particularly of importance in the convulsive form, which may be simulated so much as to deceive the most careful investigator. The authors have arrived at the following conclusions: Even a single attack of epilepsy is associated with an increase in the nitrogen and phosphates excreted. The course of the body-temperature is characteristic, being lower than normal during the convulsive period, and during or following sleep, with an increase upon awakening and a gradual rise to the normal. The urine is hypotoxic immediately after the attack, as well as during the periods between the seizures. The fatal dose of the urine of a healthy person varies between 45 and 80 c.c., while that of the epileptic is between 150 and 250 c.c. The urine of the larval or masked form of epilepsy is constantly hypotoxic, the fatal dose ranging between 150 and 480 c.c. The constant hypotoxicity in epilepsy is, therefore, an important, permanent sign, from a medico-legal point of view, especially as it may be utilized for a diagnosis of the obscure forms.—*Journal Nervous and Mental Diseases*, July, 1897.

A Case of Epileptic Icterus.—In view of the doubt which a number of writers have expressed regarding the existence of epileptic icterus, DR. FÉRÉ has felt justified in reporting a case which came under his observation in the early part of 1897. The influence of the central nervous system upon the biliary secretion has for some time been recognized in the pathological effects of emotions, and the existence of emotional icterus is no longer doubted. Icterus may be caused by an intense emotion, such as fright or anger, and may be developed immediately, as in a case reported by Bouilland, where the patient, who had received a disagreeable letter, was himself able to observe the phenomenon while shaving himself. In another case, Diderot, who one day had witnessed an execution, came home with a very pronounced icterus. Sometimes the icterus does not develop for some hours, and occasionally not for some days. The long intervals have been observed in cases of long-continued worry. The emotional icterus varies in intensity and duration, but is, as a rule, curable, and is usually only seen in neuropaths. In a hysterical woman, 30 years of age, the emotion was caused by an attack of asthma in one of her children. It is also claimed that mental impressions of a melancholy nature, especially when they have been present for some time, may favor the formation of gallstones, either directly through the resulting depression of the nutrition of the body, or secondarily by causing a morbidly increased cerebral activity and thereby an increased production of cholestearine. It has furthermore been maintained that gallstones are more frequently met with among the insane than among the sane, living under the same circumstances. Cases have been reported, in which icterus was reproduced, every time there was a repetition of the same mental excitement; thus Rayer speaks of a young man who became icteric every time he was angered. The physical condition present in anger is not without a certain analogy to the epileptic explosions; one may, therefore, expect to find icterus figuring as a complication of epilepsy. Even Hippocrates speaks of bile as the cause of epilepsy. Esquirol seems to consider icterus a common symptom in epilepsy; still Féré has only been able to find very few accurate reports concerning this in the literature, and he is, therefore, of the opinion that it is a very rarely observed phenomenon, *i. e.*, if one does not include the yellowish pigmentation of the sclera, observed before or after the attack in epileptics suffering from gastric disturbances. The case reported

by Féré is the following: A lady, 49 years of age, of nervous disposition, but who had never before been subject to epileptic attacks, was two years previously, during her menstrual period, on an excursion, when a storm suddenly came up, and she was drenched by the rain. She was, at the same time, much worried about her daughter, whose health was likewise exposed; her menstruation immediately ceased, and did not again return. Fourteen days later, while sitting at the supper table, she was seized with the first epileptic attack; she became suddenly pale, fell backwards, began to have spasms, which were followed by deep coma and stertorous breathing. Her sleep continued until next morning, when she voided a large quantity of urine of a very dark, brownish color; she had not passed urine during the attack. A short time afterwards it was observed that the conjunctivæ were yellow, and that the alæ of the nose, the temple, and forehead were of a light yellow color, which became more intense on the following day and extended to all parts of the body. The urine became still darker, and the feces of a *café au lait* color. On the third day the urine was not so dark, the feces less pale. The skin remained icteric for about eight days, and the patient experienced an intense itching, and had a very slow pulse (second day, 28). During the following three months the attacks recurred every two weeks, being nocturnal as well as diurnal, the former occurring after a couple of hours' sleep. Each attack continued to be attended by a more or less intense icterus, and the first urine voided after each attack was of the same character as on the first occasion. Of late bromide treatment has been instituted, which has prolonged the intervals between attacks, but has not diminished their severity. In every case the icterus was reproduced. Between attacks the patient has not presented the least symptom of hepatic disease, nor does she suffer from any marked gastric disturbance. In this case there can be no doubt about the existence of a relationship between the icterus and the epileptic attack. With regard to an explanation of the phenomenon, Féré refers to the theory of Potain concerning emotional icterus: the moral check causes a dilatation of the abdominal blood vessels leading to a diminution in blood-pressure, thereby producing a condition allowing the bile to pass from the biliary duct into the blood vessels by osmosis, etc.—*Progrès Médical. Hospitalstidende*, November 3, 1897.

FORMULÆ.

By H. E. Sanderson, Ph.B., M.D., Assistant Physician State Asylum for Insane, Stockton, Cal.

Fever Blisters:

Camphor	gr. v
Pulv. marantæ	gr. xxx
Bismuth. subnit.	gr. xxx
Aquæ rosæ	ʒiv

—*Buffalo Medical Journal.*

Superfluous Hair:

Tinct. iodin.	3 parts
Olei terebinth.	6 parts
Olei ricini	8 parts
Spiritus	48 parts
Colodii	100 parts—M

Sig.—Paint once a day for four days. The hairs come off with the collodion scab.—*Medical News.*

Rebellious Chilblains:

Sol. subacetate of lead	5 parts
Tincture of iodine	5 parts
Tincture of opium	5 parts
Starch	10 parts
Glycerine	140 parts—M

—*Journal de Médicin de Paris.*

Chronic Rheumatism:

Ferri sulphatis	gr. 45
Ext. colchici acetici	gr. 22
Ext. cannabis indicæ	gr. 15
Ext. stramonii	gr. 10

Div. in pil. No. 45.

Sig.—One before each meal.—*Exchange.*

Varicose Ulcers:

Sodii chloridi	10 parts
Menthol.	1 part

Sig.—Apply to ulcers, after cleansing, until healthy granulations exist. —*Therapist.—Review of Reviews.*

Hypertrophy of Tonsils:

Iodini	gm. 0.05
Potassii iodidi	gm. 0.16
Tinct. opii	gm. 1.00
Glycerini	gm. 100.00

Sig.—Use as a paint; and gargle twice daily; with half-coffeespoonful in one-half glass of lukewarm water. —*Pediatrics.*

Rheumatoid Arthritis.—JACCOUD advises the following for bathing the affected joints:

Sodii carbonat	℥iii
Sodii arsenitis	gr. xv–xxx
Aquæ	℥xv

—*Exchange.*

Creasote in Gastro-enteritis of Infants:

Creasote	m. iii
Alcohol	m. xv
Aquæ distil.	℥ iii

S.—Teaspoonful three times a day. In acute cases three or four doses stop the vomiting and diarrhea. When the diarrhea has lasted a week or ten days it is much less satisfactory.—*Presse Medicale.*

Freckles:

Cupri. Oleat.	gr. vi–xv
Lanolini	
Vaselini	āā ℥ss

Sig.—For external use.—*Medical News.*

Purpura:

Acidi gallici	ʒss
Acidi sulphuric. dilut.	
Tinct. opii deod.	āā ℥i
Infus. rosæ comp.	℥iv

Sig.—Tablespoonful every 4 hours. —*Exchange.*

Subinvolution of the Uterus:

Strychnin. sulphat.	gr. ½
Quinin. sulphat.	gr. xx
Ext. ergot.	gr. x—M
et. ft. pil. No. 10	

S.—One three times a day.—*Medical News.*

Diabetes Insipidus.—DR. BRACKMAN commends amylene hydrate for polyuria, administering 2½ grammes each evening.—*North American Practitioner—Atlantic Medical Weekly.*

Hydrastis Canadensis.—Hydrastis soothes ovarian pain; checks bleeding in endometritis, puerperal metritis and chronic peritonitis, and often relieves headache due to pelvic inflammatory affections, in women.—*Medical Summary—Cincinnati Lancet-Clinic.*

METEOROLOGY.

Summary for February, 1898.—*Temperature.*—The normal temperature of the State for February is 47.8°; the average for February, 1898, was 49.4°, a departure from the normal of +1.6°; the highest monthly mean was 73.2°, at Santa Ana; the lowest, 26.8°, at Bodie. The maximum temperature was 95°, at Salton, on the 26th. The minimum, -1°, at Bodie, on the 9th. The absolute range for the State was 96°. The greatest monthly range was 63°, at Salton; the least, 22°, at Point Lobos.

Rainfall.—The normal precipitation for the State for February is 3.18 inches; the average for February, 1898, was 2.95 inches, a departure from the normal of -.23 inches. The greatest monthly precipitation was 22.25 inches, at Upper Mabbole; the least, nothing, at several stations.

Wind.—The prevailing direction of wind was west.

Unusual Features.—There were no unusual meteorological features for the month of February.—W. H. HAMMON, Forecast Official and Section Director.

California—Tabular Statement for February, 1898.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn .... Cal.	49.5	72	37	------	------	------	10	6 44	------	10	0	18	S.	Southern Pacific Company.
Berkeley .... "	49.7	69	38	57 7	46.0	11.7	9	3.28	87.9	12	5	11	S.E.	Obs. University of California.
Colfax .... "	45.9	69	37	------	------	------	10	9.61	------	13	9	6	N.	Southern Pacific Company.
Coronado .... "	------	------	------	------	------	------	------	------	------	------	------	------	------	H. A. Masac.
Eureka .... "	50.0	70	33	56.5	42.9	------	21	8.00	79 6	0	11	17	S.E.	Weather Bureau Dept. Agr.
Fresno .... "	54.0	76	33	64.3	43.2	------	7	1.14	71.0	17	4	7	N.W.	" " "
Keeler .... "	51.3	74	32	------	------	------	0	0.00	------	9	17	2	S.	California and Nevada R. R.
Los Angeles .... "	58.0	85	40	59.0	47.0	------	4	0.51	71 0	11	12	5	W.	U. S. Weather Bureau.
Monterey .... "	------	------	------	------	------	------	------	------	------	------	------	------	------	Southern Pacific Company.
Napa .... "	46 7	68	33	------	------	------	10	1 03	------	10	3	15	S.	Station Napa Insane Asylum.
Oakland .... "	51 4	70	38	58.0	44.9	------	10	2.85	------	11	8	9	------	Chabot Observatory.
Paso Robles .... "	59.0	73	30	61.3	40.6	21.0	6	1.55	------	13	8	7	N.W.	Agr. Experimental Station.
Red Bluff .... "	51.0	76	34	59 0	43.0	16.0	14	5.45	------	10	5	13	N.W.	Weather Bureau Dept. Agr.
Sacramento ..... "	52.0	72	37	60 5	43.2	17.2	9	3.19	72.0	7	11	10	S.E.	" " "
San Bernardino "	56.2	85	33	71.6	40.8	30.8	4	0.60	------	16	10	2	W.	A. K. Johnson, M. D.
San Diego .... "	55.0	75	42	62.0	48 0	------	1	0.06	75.0	23	2	3	N W.	Weather Bureau Dept. Agr.
San Francisco .. "	53 0	70	43	58.1	47.1	11.0	11	2.13	81 8	11	8	9	W.	" " "
Santa Barbara .. "	55.9	82	40	65.0	46.8	18.3	5	0.97	74.0	17	4	7	W.	Hugh D. Vail.
Santa Cruz ...... "	52.5	81	30	64 1	40.9	23.0	10	2.67	------	13	4	11	S.W.	Ralph Springer.
Yuma .... A. T.	62.0	84	40	76.4	47.7	------	0	0.00	37.1	22	5	1	N.	Weather Bureau Dept. Agr.

Blank (----) indicates data missing.

Occidental Medical Times.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: APRIL, 1898.

TYPHOID FEVER IN SACRAMENTO.

On March 10, 1898, the *Evening Bee*, of this city, in an article entitled "Prevalence of Typhoid," stated "it is admitted that there are at the present time about two hundred cases of typhoid fever in this city. Of this number, many are cases which are in their incipiency, many are cases which have reached the danger point, and not a few are cases where the patients are convalescent." This statement was the result of an interview with "one of the most prominent of the local physicians," and, as it appeared in a subsequent issue of the *Bee*, was based upon an estimate made by that gentleman from "the number of typhoid patients which he had and the number of physicians in the city." Incidentally, the gentleman in question stated "the reports of the Board of Health touching the matter of typhoid fever are of no value whatever," because he did not report his cases of typhoid fever and did not know of any physician who did so. These statements, while well enough for publication in a daily paper, and while of undoubted value in demonstrating the professional position and extensive practice of the interviewed, through the medium of a very large local circulation, are worthless from a scientific standpoint, and are grossly misleading as regards the real facts of the situation. "Two hundred cases of typhoid fever" means two hundred patients suffering from the disease in an active form, but it is absurd to make up this number from active cases, cases in their "incipiency" and patients that are "convalescent." Taking this basis, however, and admitting that the diagnosis in every case has been correct, and that all the incipient cases would prove to be typhoid, it will still be an erroneous conclusion, for, as enteric fever is the most tedious of the eruptive fevers, such data would virtually include a number of cases chargeable to the previous month and the month following the date of computation.

The publication of statements of this character in a responsible paper is always a serious matter. They naturally excite great apprehension in the public mind and give rise to comment abroad on the part of other papers, to the manifest injury of the city. In order, therefore, to establish the truth or falsity of the alleged epidemic, Dr. T. W. Huntington, the President of the Board of Health, directed that a canvass of physicians in the city be made with a view to ascertaining the real figures. This was accordingly done between March 17th and March 25th, the basis taken being that furnished by the *Bee*, namely, "cases in their incipiency," "cases which had reached the danger point" (active cases), and "cases that were convalescent." Every licensed physician in the city was seen, with the following results: Active cases, 14; probable incipient cases, 9; convalescent cases, 16; total, 39. In conformity with these results, the Board of Health furnished a statement to the daily papers, which was duly published, but which the *Bee* promptly discredited, reiterating its adherence to its former statements, and adding that such canvass was of no value in the controversy, as it did not deal with the period at which the two hundred cases were alleged to have existed. As a matter of fact, the only result of the delay would have been to augment the number of cases, for as subsequent developments have amply shown, the number of cases has increased rather than diminished. The only element of truth in this whole matter was that the reports of the Board of Health, as issued, were misleading. These reports, while absolutely accurate as far as furnishing the number of cases of typhoid fever *reported* to the Board each month, are misleading in showing a smaller number than actually existed. This is due to the fact that the notification of typhoid cases by physicians is not compulsory, the ordinance governing these matters including only smallpox, diphtheria and scarlet fever. Recognizing this result, the Board of Health has directed the discontinuance of any mention in its monthly reports of cases of contagious disease other than those in which notification is compulsory.

Typhoid fever in Sacramento is not a new disease. Cases occur in the city from time to time, and there is always an increase in the prevalence of enteric fever in the fall. Within recent years, however, the city has been comparatively free from this disease; in fact we believe that since 1883 there has been no such prevalence as now exists in Sacramento. The cause of the disease is easily ascertained. The chief factor therein is the water with which the town is supplied. This is taken from the Sacramento river directly, and without previous treatment is pumped directly into the city mains. It is only necessary to infect this water supply in order to insure a large number of cases amongst those who persist in drinking the untreated water. A contributory cause, no doubt, at the present time is the condition of the city sewers. Owing to the prolonged dry season, these have never been thoroughly or efficiently flushed, it may said, since early in the year 1897. Most unfortunately, at this particular juncture the evil has been increased by the fact that the city fathers have, under ordinance, permitted householders to connect directly with the sewers without providing any facilities for flushing the conduits. Against this the Board of Health entered emphatic protests, pointing out the dangers that would inevitably follow such a procedure, but these protests were ignored by those in authority who must now assume their share of the responsibility. The remedy lies in procuring for this city a plentiful supply of admittedly pure water, and in the construction of a complete and modern system of sewers and sewage disposal. Both of these *desiderata* are within the reach of Sacramento, but neither can be obtained without the expenditure of a great deal of money nor until the lapse of considerable time. The only remedy, therefore, for the existing conditions, which are tolerably certain to become worse later in the year, is the proper treatment of the river water on the part of every householder before serving it as fit for use.

NOTES.

The Discussions.

The following are the Standing Committees, with the names of the Chairman and of the members who will open the discussions in the various sections. Wherever obtainable the title of the paper is also given: Clinical Medicine, H. L. Pace, Tulare—"Clinical Medicine of To-day;" E. E. Kelly, San Francisco. Surgery, D. D. Crowley, Oakland—"Brain Surgery;" T. W. Huntington, Sacramento. Obstetrics, D. A. Hodghead, San Francisco—"Some Practical Hints on Obstetrics;" W. F. McNutt, San Francisco. Gynecology, C. A. von Hoffman, San Francisco—"On the Treatment of Fibroids of the Uterus, and a few Remarks on Curetting;" Beverly McMonagle, San Francisco. Diseases of Children, H. V. Armistead, Newman—"Progress in Management of Medical and Surgical Diseases of Children;" F. W. D'Evelyn, San Francisco. Ophthalmology, Wm. Ellery Briggs, Sacramento—"Effect of Electric Light on the Eyes;" W. D. Babcock, Los Angeles. Laryngology and Rhinology, Henry L. Wagner, San Francisco—"Local Treatment in Acute Inflammation of Tonsillar and Peri-tonsillar Regions;" J. Dennis Arnold, San Francisco. Mental Diseases, J. W. Robertson, Livermore—"Relation Existing between the Sexual Organs and Insanity, with Especial Reference to Masturbation;" A. W. Hoisholt, Stockton. Dermatology and Venereal Diseases, L. Bazet, San Francisco—"Resume of the Present Condition and Advances of Renal Surgery;" George F. Shiels, San Francisco. State Medicine, C. W. Evans, Modesto—"The Sanitary Care of Tuberculosis in Public Hospitals;" J. H. Davisson, Los Angeles. Medical Topography, R. A. Fergusson, Bakersfield—"Malaria and the Autogenous Febrile Conditions in Kern Valley;" M. F. Price, Colton. Botany, George A. Hare, Fresno—"The Medicinal Possibilities of the California Flora." Medical Jurisprudence, H. E. Sanderson, Stockton—"Some Recent Legislation;" W. LeMoyne Wills, Los Angeles. Histology, Chas. M. Fisher, Oakland—"Our Present Knowledge of the Cell;" S. H. Buteau, Oakland. Pathology, Claire W. Murphy, Los Angeles—"Arterio-Sclerosis—Acute Yellow Atrophy of the Liver;" D. W. Montgomery, San Francisco. Medical Education and Legislation, Chas. A. Rodgers, Bakersfield—"On Medical Legislation;" R. H. Plummer, San Francisco.

Voluntary Papers.

"Some Uncommon Fevers in Southern California," by A. L Kelsey, Santa Paula; "Evolution of Ocultism in Medicine," by P. C. Remondino, San Diego; "Sero-Therapy," by George L. Cole, Los Angeles; "The Motor Functions of the Stomach," by A. W. Perry, San Francisco; "Congenital Dislocation of the Hip," by Joseph Kurtz, Los Angeles; "A Preliminary Report on the Treatment of Congenital Dislocation of the Hip by Operative and Manipulative Methods," by H. M. Sherman, San Francisco; "Report of a Case of Scurvy in Infancy," by W. F. Cheney, San Francisco; "Hereditary Polydactylism in Three Generations," by W. J. G. Dawson, St. Helena; "Some Overlooked Sources of Infection," by J. L. Dryer, Santa Ana; "Home Sanitation," by Louise M. Harvey, Los Angeles; "Laryngeal Stenosis," by H. Bert Ellis, Los Angeles; "The Use of the Cataphoric Effect of Electricity in Diseases of the Nose and Throat," by George S. Hull, Pasadena; "Modernized

Methods for the Removal of Inferior Dental Nerves for Neuralgia," by J. A. Black, San Francisco; "Stacke's Operation, the Cure of Chronic Otorrhea," by K. Pischl, San Francisco; "Strangulated Hernia—Report of Eight Cases," by Emmet Rixford, San Francisco; "Surgical Treatment of Tuberculous Peritonitis," by T. E. Taggart, Bakersfield; "Wiring the Patella in Fracture of that Bone," by George F. Shiels, San Francisco; "Where the Leg Should be Amputated," by J. P. Dunn, Oakland; "Washing of the Bladder," by D. Granville McGowan, Los Angeles; "Pathological Conditions of the Gastric Fluids and their Significance," by A. J. Sanderson, St. Helena; "Drug Habit as a Nervous Disease and its Treatment," by Chas. Lee King, Pasadena; "The Study of One Hundred Cases of Epilepsy," by P. K. Brown, San Francisco; "Observations on Chorea and Convulsive Tic," by Leo Newmark, San Francisco; "The Need of More Thorough Mental Culture Preparatory to the Study of Medicine, by D. B. Van Slyck, Pasadena; "The Course of Study in Our Public Schools," by H. G. B. Wright, San Jose; "Septic Endometritis," by Walter Lindley, Los Angeles; "Puerperal Convulsions," by J. P. Hinckley, Fillmore; "Some Thoughts on how Environment of the Mother during Gestation Affects the Offspring," by Jenny T. Leonard, Merced; "Abdominal Pregnancy Coëxisting with Normal Uterine Gestation," by H. P. Mathewson, Visalia; "Medical Topography of San Gorgonio Pass," by John C. King, Banning; "Report of Two Cases of Pregnancy, following Ventro-Fixation," by G. W. Otto, Santa Barbara; "Practical Microscopy and Bacteriology for the Physician," by W. N. Sherman, Merced; "Structural Elements of the Nose and Throat," by F. B. Sutherland, San Francisco; "A Case of Hemianopsia due to Penetrating Wound of the Brain," by A. B. McKee, San Francisco; "Report on the Examination of the Eyes of School Children, with Special Reference to the Prevalence of Rhinitis," by Fred Baker, San Diego.

Free Clinics and Contract Practice in Alameda County.

For a number of months the combined evils of contract practice and the abuse of free clinics has been under discussion by the Alameda County Medical Society. After due deliberation, the following resolutions were prepared, and were unanimously adopted. They have also been adopted by Committees from the Eclectic and Homeopathic Societies, and have been signed by almost every person practising medicine in the county.

WHEREAS, The existence of free clinics, and the rendering of professional services at a stipulated fee *per capita* [for any stated

time is opposed to the best interest of the general public and the medical profession, we, the undersigned surgeons and physicians of Alameda county, State of California, enter into the following agreement:

1st. We mutually, jointly and individually, pledge our word of honor not to enter into any contract or agreement, or renew any existing contract or agreement, either written, verbal or implied, to render medical or surgical services to any lodge, free clinic, health mutual association, or trade or labor union, to extend beyond the 31st day of December, 1897.

2d. We will not render medical or surgical service to the members of the above mentioned bodies for less compensation than we charge the general public for similar services.

3d. This agreement shall not be construed to affect physicians or surgeons in responding to the calls of charity.

4th. It is understood that the above agreement shall not be binding unless signed by a large majority of the physicians of the three schools of medicine, and finally ratified by their several medical societies.

The Society also adopted a resolution refusing professional recognition or support to any physician violating the spirit of this agreement, or professionally recognizing or assisting one who does. This may be regarded as rather stringent. Similar resolutions elsewhere have been condemned in unmeasured terms and bitterly fought. We believe, nevertheless, that, at any time, such a resolution is in order and that it is within the province of any body of medical men to say with whom they will associate, and having adopted such restrictions to enforce them.

Degeneration in the Character of Advertising in Medical Journals.

In a recent issue of the *American Journal of Surgery and Gynecology*, the editor, Dr. Emory Lanphear, while discussing the degeneracy of the medical profession, makes some very pointed remarks on the standard that seems to govern the advertising pages of many medical journals of to-day. He says:

"Another indication of the general lowering of professional standing is the condition of the advertising pages of many medical journals of to-day. Time was when no secret remedy could secure insertion of an advertisement in any medical journal presumed to be 'half-way decent;' indeed, it would have been folly to place it there even if the editor and publisher would permit it—there was none so low as to prescribe it, and the money paid would have been wasted. What of to-day? A dozen journals of America are carrying the ad. of 'Candy Cascarets'—a patent medicine pure and simple—with no pretense of a publication of even a supposed 'formula;' still more are running the advertisement of 'Ripans Tabules,' a patent medicine under the control of Geo. P. Rowell & Co., the advertising agents, of New York City—and not a doctor in America knows their composition. 'Antibrule,' a new St. Louis remedy, of unknown composition, is equally conspicuous upon the sign boards along the streets, on the street car placards, and in the pages of medical journals edited by highly ethical members of the American Medical Association. And now comes the 'old standard household remedy, Ayer's Cherry Pectoral,' and applies for admission to the advertising pages of some forty of the prominent journals of America! It will undoubtedly secure space in a large number. The humiliating part of the thing is not that these ads. are accepted by needy editors and publishers—hunger has affected the conscience of many a man even before 'medical ethics' were thought of—but that medical men are becoming so careless of their professional honor, so unmindful of their own good, so insensible of the great downward plunge they are taking when they prescribe such things. That they do and will prescribe them goes without saying—the proprietors of these goods are too sagacious to put money into advertising lines that do not pay. They have 'sized up' the medical profession, in the language of the bunco-steerer, and have concluded that 'the sucker must be caught.' No one can deny this assertion that the average medical journal of to-day is a brilliant illustration of the deterioration of the medical profession."

All this is perfectly true, yet we think the writer ought not to have omitted the alleged California "Syrup of Figs," the advertisement of which appears in many medical journals, nor "Pond's Extract" a recent candidate for professional recognition. Another evil, just as pronounced yet far more damaging to the journal and to the profession, is the "reading notice." In the pages of many medical journals fulsome notices, absurd testimonials, making the most preposterous claims for vaunted remedies, and alleged scientific articles written by "German professors," or by some, native to the soil, are constantly to be found. It must strike the average reader as peculiar that so many testimonials in relation to widely different remedies emanate from a select few of the profession in this country. The remarkable coincidence may possibly have a commercial basis, for it would seem impossible that such unanimity on any scientific question could be produced by merit alone. We believe that it is an insult to the profession and a fraud upon the subscriber, who pays for a medical journal, to furnish him with material under the guise of medical science that really appears at so much a line.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, January 18, 1898.

The President, W. J. HANNA, M.D., in the Chair.

DR. JOSEPHINE CALLAHAN read a paper entitled "Some Remarks on Bicycling for Women." [Published at page 172.]

DR. J. H. PARKINSON: I find it somewhat difficult to discuss this paper because I am so entirely in accord with the sentiments of the author. I am not a votary of that form of exercise myself and can, therefore, speak from an unprejudiced standpoint. I am in favor of the use of the wheel, both upon theoretical grounds and from practical experience. I think we should all look upon the subject from the light of our experience, and those of us who may have a prejudice against it from other points of view should endeavor to ascertain the advantages that it undoubtedly confers. First in importance is outdoor exercise. There are comparatively few of our women who will go out doors to walk, and this the wheel compels them to do. It takes them into the open air, and, in a flat country, in the absence of scenery, the use of the wheel seems to detract from the monotony. There is no question as to the direct advantages that the wheel has produced, and there are others indirectly, amongst which, as has been well brought out, is the change in the direction of better clothing. You find skirts discarded, corsets abandoned, better shoes being worn and most radical changes as regards underclothing, and this is all due to the wheel. All of our teaching and preaching has not succeeded in producing this Our patients may adopt these changes for awhile, but with returning health they forget all about them. The disadvantages of the wheel are those, of course, which are attached to any form of over-exercise. As for the dangers in connection with the use of the wheel, they are, perhaps, as great as those attached to horseback riding, which is an excellent form of exercise. As to the question of the wheel which should be ridden—a man's or a woman's wheel—I certainly approve of a woman's wheel for women. It is easier to mount and to dismount and permits of suitable and becoming dress. I am glad that the author of the paper has voiced the sentiment of bloomers being unbecoming and unsightly. They are a hideous garment as must be apparent from the exhibitions we have seen on the streets. The short skirt is becoming and artistic. As to injuries that might be caused by the use of the wheel where weak points already existed, as in varicose veins, I thought, at first, that that particular trouble might be increased by bicycling, as we know that prolonged exertion is apt to exaggerate that defect. From my observation, however, it has rather been a benefit, due, I presume, to the muscular development and the better circulation that ensues. Neurasthenia is markedly benefited by this form of exercise, as also is constipation. I heartily approve of the use of the wheel, for women, with the proper limitations for its judicious use.

DR. F. B. SUTLIFF: I would like to say that when I was riding a wheel, I was in a very good state of health and when I ceased riding I became rheumatic. It is certainly a healthy form of exercise and I think it has come to stay, and that women will use it more and more.

DR. H. D'ARCY POWER: As one of the first riders of a safety bicycle, I was very glad indeed that our hostess assumed the position that she has. I am almost entirely in accord with her views regarding the use of the bicycle as a healthy mode of exercise, both for men and women. I have always believed that the increased amount of pelvic trouble is due almost entirely to the absence of muscular tone, and I feel, for that reason, that cycling, as an outdoor exercise, is of immense benefit to those who take it up in a rational manner. I differ from the author in one or two minor points. I do not approve of high shoes I think the experience of most riders inclines to the opinion that the ankle should be free, and I know from experience, that it is much easier to have the ankle free. Then, again, in regard to the question of position: I am not a believer in the forward position; and I think it is a thing to be especially avoided, in the case of women. The one possible objection that I can see to the bicycle for women riders is the possibility of crowding down the pelvic organs, and it is clear that this is more easily done in a forward than in an upright position. As to the spinal shock, I do not think it is materially increased if the spine is fairly bent. I think you will find more ease and as much freedom from shock as if bending forward and straining the arms This brings me to another point, that is, the choosing of a wheel for those who are not particularly strong. It is desirable to have as much elasticity as possible in the saddle and handle bars I believe the most comfortable wheel is one with a spring saddle, and if possible, spring forks. I am sure, as far as comfort is concerned, that at the end of a long day's ride, it is the question of freedom from shock which tells A spring fork and a spring saddle, with a rigid tire, will give you more comfort. By using the muscles of the leg in pedaling there is a useless expenditure of force; there will be less congestion of the lower part of the body if you carefully train for foot pedaling rather than leg pedaling. The best teachers have always taught that you keep a bicycle going with less expenditure of force by keeping the pedal going round with the foot alone. There is one point about cycling as an exercise, in which it seems to present advantages over walking, that is its effect on the upper part of the body I used to be an enthusiastic walker I used to walk twenty and thirty miles in a day and my arms never developed, but when I turned to cycling the increased girth of the arms was quite noticeable.

Dr. W. E. Briggs: I know very little about the advantages of the wheel for women except in a general way. I think the exercise of walking is preferable and better for women and men than riding a wheel, but as a matter of fact, the women who need exercise most will not walk. There are a certain number of women who are undoubtedly benefited by exercise in the open air and who, were it not for an inducement of this kind, would not get it in any other way. I believe that the position of walking, with the body erect, with the vessels unobstructed in every part of the body, is a better one than that in riding a wheel. Of course it possesses the advantages of taking women out in the open air, whereas, otherwise, she would not go. As time goes on they will find more disadvantages from riding than has been observed at the present time. There is some danger attached to cycling. I am familiar with one accident that occurred a short time ago, where a woman met with a mishap, having been run over by a horse and wagon. Fortunately she was not seriously injured, and is now as anxious to ride as ever, and believes she is benefited by out-door exercise. I agree with her, but I would advise that women should be prudent and should use it moderately, and I think in this way they will receive a great deal of benefit from the wheel.

Dr. H. W. Strader: I have recommended the use of the bicycle in neurasthenia with satisfactory results, and with caution the wheel can be used in heart, lung, and chronic pelvic troubles. There are some conditions that are benefited and others that are aggravated by its use. I have cautioned a great many to use the wheel cautiously, and if no evil resulted to increase the exercise I think neurasthenic conditions, associated with headaches or neuralgias and constipation, are more markedly benefited in this way than by any other form of treatment.

Dr. H. L. Nichols: I have thought, perhaps, that the wheel was a good vehicle for exercise and for business, but I must say that I have not been impressed with its use for women. It seems to me that horseback riding is a better form of exercise, although I have had no personal experience. So far as the muscular exercise is concerned, I have no doubt it is good, but it seems to me that the difficulty of keeping a wheel upright, particularly for a woman, must be somewhat detrimental to health, and somewhat of a strain upon the nervous system. They must certainly be on the lookout continually for accidents I am inclined to think that the mental strain is anything but beneficial; otherwise I do not see that it can be injurious.

Dr. W. A. Briggs: I think the wheel is a valuable means of locomotion and very useful in many ways, for women and men.

Dr. H. H. Look: I cannot see as much advantage in the wheel as some do. It is really not yet a success. The seat is yet abominable, and it is incompatible with good health. As far as locomotion is concerned, you "get there" with it by main physical energy; for it requires just as much energy as it does to walk there; and besides, it requires a person with a pretty active mind and pretty active eyesight as well. No man in the decline of life can afford to learn to ride a wheel. That is my experience. A man must have all his faculties about him in order to avoid all of the little obstacles that may arise in the course of his journey. I most certainly consider the wheel not yet a perfect instrument; it has not approached perfection, and whether it can be made perfect or not I am unable to say. I think it is here to stay, at least for a while. It is a kind of fad and will ultimately simmer down to be used only by those who need it for convenience in connection with their work.

Dr. Callahan, in replying, said: I think most of the members have discussed the subject from the standpoint that women take long rides and climb hills and make it a matter of everyday hard work. No doubt, under such circumstances, the use of the wheel would be injurious to women. I wish to emphasize that they should be careful and not ride too much nor too often. Moderation should be insisted upon. The position is very important, as when riding in a bad position there is more or less strain The wheel should also be carefully adjusted. It is important to have a teacher who understands his business, that the pupil may make a good beginning, thereby avoiding bad habits and consequent accidents. As for riding on crowded streets, I do not think ladies should venture there unattended by a gentleman, as they are likely to become confused and suffer from nerve strain at least. There is more or less danger attached to driving; it is not perfectly safe. I think it can be shown that there are a great many more accidents from driving than from cycling, and while I may have spoken enthusiastically of the wheel, I think it is a good thing, and I believe as we become better acquainted with its merits we will appreciate it more. The exercise of riding and walking is, for women at least, little better than staying in the house, except that they obtain fresher air, as owing to modern dress the movements of all the muscles are greatly restricted. During exercise on the wheel, all muscles, voluntary and involuntary, and I might say every fiber of every muscle, is brought into action. In this form of exercise a loose and comfortable style of dress is essential, and in this way there has been effected a reform in dress that is most beneficial. I do not mean in the way of bloomers, and I do not wish to be understood as advocating the cause of the "new woman," but there is more benefit to be derived by my sex from the judicious use of the wheel, than by any other form of exercise of which I have any knowledge.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, February 8, 1898.

The President. A. P. Woodward, M.D., in the Chair.

New Members.—John J. Flood, M.D., H. Herrington, M.D., and Louis P. Oviedo, M.D, were duly elected members of the Society.

Dr. J. H. Barbat read a paper entitled "Which Surgeon shall we Choose in Appendicitis?" [Published at page 169]

Dr. B. McMonagle: The operation for appendicitis has been so well established by surgery that there can be hardly any doubt as to the necessity of it in many cases. The surgeon has, I think, by this time established the operation for appendicitis as a preventive procedure; I mean not in the sense that we should take out the appendix to prevent the occurrence of appendicitis, but in the sense that the infected appendix is removed before it has time to infect the adjacent tissues. The physician usually advises delay, and he advises it on, no doubt to him, sufficient and well considered reasons. His reasons usually are, first, that any given case of appendicitis may run a mild course and the patient recover; second, that in favorable cases where operations are done, the patient often develops bad symptoms and suddenly dies; third, that ventral hernia is very apt to occur after operations for appendicitis; fourth, that the patient's life is at once placed in jeopardy, and the time lost in recovery is apt to be very great. In the first instance, I think it has been pretty well established, as claimed by Dr. Barbat, that the operation for appendicitis in the early stage is very likely to be less dangerous than to allow any given case of appendicitis to proceed on the presumption that it will be a mild case. The results of the operation, for those gentlemen who do their operations as Dr. Barbat has suggested, well, who work aseptically and carefully and early, is sufficiently above the results of those physicians who allow their cases to go on under the opium, rest, and expectant treatment, to justify us in believing that the operation in itself, done early and well, is less dangerous than the presumed mild case, left to go on by itself. Again, it is impossible for any man, physician or surgeon, to decide what case will be a mild case. In regard to those cases which die suddenly, after an operation done at a favorable time and under favorable circumstances, they are decreasing very rapidly. As Dr. Barbat has suggested, it depends greatly on the method in which the stump of the appendix is managed. Formerly it used to be considered that if the appendix was raised up and the ligature thrown around it with no more precaution, the case would go on to a successful issue, or at least what was best had been done for it. But it is a pretty well established fact that you cannot tie off the bowel with a ligature and allow it to so remain, without a strong probability of infection. It is quite possible to tie off an artery and not stitch the end over You may render it aseptic or in any way protect it, and have a thorough healing go on But in tying off a piece of the intestinal tract, we tie off an infected canal—a canal that carries with it the germs that will set up a malignant process in the peritoneum. Then there is poor nutrition around the ligature, and a slough forms, the tissue dies and the infection goes out from behind the ligature. I think that many of those cases that the physicians claim die in favorable cases, are due to the method of tying off the stump. Dr. Barbat has suggested that the method of Barbon is the best one. That is a matter of individual choice There cannot be a doubt that Barbon's method is a good one; but any method which takes the appendix off in an aseptic fashion and closes the stump over, so that the serous surfaces will adhere as quickly as possible, is a good method. It is quite immaterial what name is attached to it or who adopts it. In regard to the chances of ventral hernia occurring, this was urged against the operation at a time when the operation was done in desperate cases, and a long incision had to be made. In proportion to the length of the incision, more or less —other circumstances, those particularly of infection, being considered—we have the chance of ventral hernia resulting. If we can succeed in getting the appendix out of an inch, or an inch and a half, or two inch incision, the chance of ventral hernia resulting from that is very much decreased over the case where we have to make an incision five or six inches long. The method of McBurney, of separating the muscle without cutting it, without injuring the nervous nutrition of the part, as well as the blood supply, has greatly decreased the chances of ventral hernia resulting. As a matter of fact, if the peritoneum alone, as Dr. Barbat has suggested, is closed, and no other part of the incision is closed, and nothing is done but what might be called an anatomical operation—that is, the separation of the muscles along their fibers, the gridiron crossing there of the abdominal wall will sufficiently close the abdominal wall. Then if the subcutaneous stitch is used, no infection results. We have an aseptic healing, and the scar is not very bad even in an esthetic sense. In regard to the time the patient remains in bed, that again is an individual opinion of the surgeon, and depends largely on the condition of the patient when he went to bed. In so far as the healing is concerned, if stitches are used that remain aseptic after the operation, and that are put in in an aseptic condition, the chances are that the patient can get up quite early. Some gentlemen allow their patients to get up as early as three or four days after the operation; some insist on their lying in bed three weeks. As a matter of fact, an incision that has remained only two or three days in quiet, cannot be expected to resist the same amount of pressure, the same amount of strain put on it by the exercise of the patient, as an incision that has been allowed to remain at rest for three weeks Those are things that each individual surgeon will have to decide, according to the condition of the patient and the condition of the healing after the operation. Now, again, in order to show what the surgery of nature, as Dr. Barbat suggests, will do for the patient, I will try to give you, from my memory, the history of a case which I think Dr. Sherman also saw. Two years ago I saw a patient, in consultation with Dr. Pawlicki. I made a diagnosis of appendicitis, and advised an operation. The family were dissatisfied. We called in Dr. Leonard and Dr. Ragan. They could not find the appendicitis. At that time I made an examination, and I could not find the appendicitis. A large amount of the tenderness had disappeared. I was compelled to say to the family that what I had supposed was an appendicitis had disappeared, and it seemed to me that I had made an error in the diagnosis. I felt a good deal mortified, but for some strange reason or other the family still continued to have me in consultation, and Dr. Pawlicki asked me to take charge of the case. The next day, after we had come to the conclusion that there was an appendicitis there, the man, who had already been passing some pus by his urethra, began to pass a large amount, and on the second day after he was passing fecal matter in the same manner. I then thought that an appendix abscess had opened into the bladder. However, I was somewhat in doubt, and I asked Dr. Chismore to see the case with me, thinking that possibly he could clear it up. Dr. Chismore told me that he was satisfied there was no stone in the bladder, but where the fecal matter came from he was not exactly sure. He suggested that Dr. Sherman come. Dr. Sherman came there in order to decide that we had no tubercular hip disease. The patient was very ill indeed. Dr. Sherman came and told us that he did not have any tubercular hip disease. But the patient, in spite of all of us, continued to grow worse, and his pulse became dicrotic, and it looked as though he was going to die in a short time. I told the people that I still had an idea that there was an appendicitis there, and Dr. Sherman and Dr. Chismore both agreed that there was pus and that an opening should be made. We made the opening, and got, just above Poupart's ligament, quite a large discharge of pus. The young man improved and went on very nicely. The fecal matter ceased to come through the bladder. I never could tell whether he had an appendicitis or not until he went on and got entirely well, and went about his occupation, and came back to me about six months ago with what I then said was an attack of appendicitis. It was all swollen up in the right iliac fossa, and there was a small sinus remaining where I had made the opening before. Then I determined to go well up on the abdominal wall and make a long incision up above what I supposed were the adhesions around the appendix. In that case I found there was appendicitis. I found that originally the appendix had been diseased; that the end of it had attached itself to the peritoneum just anteriorly and at the outside of the iliac vessels; that it had opened into the peritoneum and into the bladder and was discharging fecal matter. I tied off the adhesion, took off the appendix, enlarged the incision along the sinus and drained the wound, and the young man recovered entirely.

Dr. W. F. McNutt: I think that the time has gone by to discuss even the propriety of operating for appendicitis in proper cases, and I think that the time has gone by for surgeons to accuse physicians of refusing the operation or denying the propriety of operating I have got tired of the articles that I see in the medical journals about surgeons talking about physicians letting patients die for the want of an operation, and refusing the operation; and I have got quite tired of the number of cases that are reported where physicians were incapable of making a diagnosis until a surgeon was called in to make the diagnosis. My experience—and it is quite a large one—is that physicians are quite as good diagnosticians as surgeons; for internal diseases I think they are a little better; for the simple reason that they have had more experience. I have seen surgeons who could operate very well for appendicitis, but who had very little experience in making a diagnosis of abdominal diseases. I do not think anybody doubts, and I do not know of any physician who questions the fact that appendicitis should be operated on, though not every time. I think the time has entirely gone by when a surgeon will claim that every case of appendicitis, or every man who has a pain in his bowels should be operated on and his appendix taken out. It is simply a matter of impossibility to say just what cases should be operated on. Statistics show that there are about 10 per cent. of all the cases that will end in gangrene or suppuration, or will not recover if not operated upon. If we only knew in what cases the 10 per cent. would occur, of course the question would be solved. But there is just the question. There is no way of making a diagnosis. However, there always have been, and always will be cases that should not be operated upon. Then, on the other hand, supposing that every case was operated on in its incipiency, would there be a less number of deaths? That would be another question; even if no other accidents happened. When you speak of no accidents and no deaths in appendicitis, we mean that there is not very much danger in operating for appendicitis, if you have a patient in a hospital, where you have an aseptic operating-room; where you have every means of sterilizing your instruments; where the patient is properly prepared, and where the physician or surgeon is a capable and competent man, there is very little danger. Nobody hesitates at all to open the abdomen, even as a matter of diagnosis; but how many cases of appendicitis, occurring all over the country in every direction, are under the very best circumstances for operation? How many men who are called upon to operate, or to attend a case of appendicitis, have had experience in operating upon the abdomen? Under the circumstances there are thousands of cases occurring all over the country where the chances are 50 per cent better to leave them alone than to operate upon them. This doctrine, or the teaching that every case should be operated upon, and that there is no danger in operating for appendicitis, and that as soon as there is a pain in the bowels the operation should be performed, is simply nonsense. Even when pus occurs, I am satisfied that the majority of operations should be confined simply to opening the abscess. I think any intelligent physician has just about as good an idea of appendicitis as a surgeon. I think that if he does not want to operate himself, he has no hesitation or doubt about the propriety of sending for a surgeon to operate. A while ago, a medical journal sent around a reporter to interview some surgeons in the East, asking what should be done in a case of appendicitis. One said "send for a surgeon." Another said "send for a surgeon immediately to make a diagnosis." Evidently he had an idea that there was nobody but an operator who could make a diagnosis. Of course, anybody ought to know that it is sometimes very difficult to make a diagnosis; it is very difficult sometimes to know whether you are dealing with a case of appendicitis or salpingitis, for instance. Everybody knows that at one time the appendix is seven inches long, and at another time one inch long. Everybody knows that at one time it is pointing towards the northeast and the other time towards the northwest, and sometimes down south. You will find the appendix in the pelvis; you will find it adherent to the ovaries; you will find it passing over and adhering to the small intestines; you will find it behind the colon; you will find it in all directions and in all lengths. Probably there is no abdominal organ, when diseased, that is so hard to diagnose as an inflamed appendix. It is an absolute impossibility, in every case, to make your diagnosis.

Dr. P. K. Brown: There is an interesting aspect of this case bearing on the determination of the time when surgical treatment ought to begin, to which I want to call your attention. That is, the determination of the number of white corpuscles that may suddenly appear in any case of rapid abscess formation. I suppose that abscess formation in this part of the body occurs more frequently than it does in any other place; and, admitting that the diagnosis of appendicitis has been made, the determination of whether or not you will have to deal with an abscess can be very often done by a count of the white corpuscles. I believe Cabot, in a series of 72 cases tabulated in Boston, points out the fact that all the catarrhal cases, but one had no increase in the white corpuscles. He makes the statement, as the result of the analysis of these cases, that in mild infections and in the catarrhal form, there is no increase; that in the abscess formation or in the infection from pathogenic organisms you get a rapid increase—an increase that can be noted as the counts are made from hour to hour; that very frequently the only determination that the course of the disease is going to be unfavorable can be made by a count of the white corpuscles. For instance, the rapid spread of the pus; failure of the pus to be walled off is determined that way. It is true that in very intense infections, such cases of appendicitis as we see occasionally, called fulminating, where death may occur within 36 hours of the onset of the disease, very frequently there is no increase in the number of white corpuscles. Those cases are accounted for by the lack of resistance on the part of the individual, appendicitis occurring in the case of a person of very poor health; indeed, where the indications are clinically so marked that the unfavorable course of the disease would be indicated, any way.

Dr. C. G. Kenyon: The representation that the doctor has given us in his paper this evening is that of an ideal case of appendicitis. That is, the appendicitis in the beginning. If such cases fall under the hands of an aseptic and expert operator, they can be operated upon with a minimum amount of danger. That goes without saying. It seems to me it is not well to split hairs in regard to the corpuscles, or whether we are going to have an abscess or not. If those in charge of a patient of this kind are satisfied that there is an appendicitis, whether the person might recover from that attack or not, it is still good practice; taking for granted, of course, that the operation is done under the most favorable circumstances. Certainly the early operation offers the best prospect. Lawler, I think it is, writing upon this subject, says that in 95 per cent. of the cases of attacks of abdominal pain, with fever, the cause is in the appendix. If, then, the operation is done at once, before we wait to see whether we are to have an abscess walled off, or whether that individual attack will recover, if the operation is done under favorable conditions, almost to a certainty that patient will recover There is no danger of subsequent attacks. Even though, as Dr. McNutt has said, 90 per cent. of these cases recover without an operation, in a large number of that 90 per cent. there will be recurrent attacks. How many persons who have passed the first and second attack have died in the next attack. If they had fallen into the hands of an operator at the first attack, they would have avoided the danger of subsequent attacks. It seems to me to be an up-to-date procedure, in cases where there is an attack of abdominal pain, with tenderness over the region of the appendix, to make an incision at once, as soon as the patient can be put under proper conditions. We then have an aseptic field; if the surgeon is aseptic, the operation can be done with minimum danger. If we wait until pus is formed, we have then a septic field to operate in, and danger of inflammation, and the ideal operation as described by the doctor, cannot be performed, because the cut must be larger, drainage must be used, and the danger of ventral hernia follows, which it does not in the operation at the inception of the disease.

DR. G. W. DAVIS: Within the decade just passed I presume there is no portion of the body that has been so often before the profession, both medical and surgical, for attention and study, as the region of the appendix. Of its importance there can be no question. The gentlemen who have preceded me in this discussion impress us that they have given the subject of appendicitis much careful thought. While I quite fully agree with the author of the paper and with Dr. McMonagle, that an operation, in many cases, is the procedure, yet I believe that a large number of patients perfectly and permanently recover without requiring surgical treatment. Very many eminent medical men have expended much time and thoughtful consideration as to the best therapeutic means for treating this affection, and I think it must be promptly acknowledged that they have been exceedingly successful in their results. I remember that about two, possibly three, years ago, I had a case of appendicitis, which was confirmed by a brother practitioner. The patient was quite ill. Within two or three days I discovered signs that led me to believe the presence of secondary syphilis was the cause of his trouble. I immediately prescribed generous doses of mercury. There was a distinct, well-defined doughy mass in the appendical region. In less than eight or ten days this mass began to soften, and in about two or three weeks it could not be readily felt. The syphilitic treatment was continued. The young man recovered, and has had no further difficulty in this direction. This was certainly a case in which an operation was not required. It cannot be said that an operation requiring an anesthetic is without danger, and, therefore, the necessity for one should be strong before making it. Two years ago April next, I was called to a young lady whom I found suffering from appendicitis. I was informed that she had had an attack of the same difficulty about two years before, while living at Seattle, Wash. Dr. Henry Gibbons kindly saw the case with me. In his mind there was no doubt as to the diagnosis. We agreed to wait for more urgent symptoms before operating. I was fully prepared to operate if subsequently found to be the only course. In twenty-four or thirty-six hours the patient began to get better, and finally recovered. I do not think that since the fourth or fifth week of her illness has she had any pain in that region. About six months ago I saw a similar case, in a young man. Several times I felt I would be compelled to operate, but, at the earnest request of his parents to postpone as long as possible, I did so. He recovered without surgical interference. It is sometimes difficult to make a diagnosis, as evidenced in a recent case of abdominal abscess, confined to the lower portion of the right hypochondriac and the upper portion of the right lumbar region, which was found, upon operating, to be due, primarily, to an appendicitis. When we are fully satisfied that an appendicitis existed, and it is a recurrent one, or has recurred two or more times, with more or less pain and tenderness in the neighborhood of the appendix, I would strongly advise an operation during the quiescent period.

Dr. C. G. Kuhlman: It seems to me that until we have access to reliable scientific data, contained within the hospitals in this city, the discussion by this Society as to the value of surgical diagnosis, or diagnosis and treatment by surgeons of these conditions, is absolutely valueless. The hospitals are, so to speak, closed against the medical profession of this city, and most of these cases are diagnosed and treated in hospitals by the surgeons connected with them. In regard to the value of leucocytes, it seems to me that that point is of absolutely no scientific value, because physicians know that all cases of appendicitis that go on to ulceration, and all irritations of the cecum that go on to inflammation and ulceration, occur in the strumous, where we have, of course, a larger number or an increase in the white blood corpuscles long before there is any irritation of the cecum or the appendix.

Dr. Henry Gibbons, Jr.: I wish to say a word or two on this subject; not in its surgical aspect, however I might illustrate by a case that came under my observation when a student. Appendicitis is no new thing, of course The name is new but the disease is not new. One of the professors under whom I received instruction said to the class one day that he had been called to see a case of pain in the abdomen. It was considered one of constipation, and a dose of 10 grains each of calomel and jalap were given without effect. I believe other doses were administered, of a purgative character, without result. Soon the pain extended over the abdomen, and there was manifest appendicitis. The patient died. Examination proved the condition to be one, as it was then termed, of typhlitis—inflammation involving the head of the colon. Some time after that, when I was a graduate in medicine, I was taken by my father to see a case of peritonitis. There was obstipation; as it was supposed to be the beginning of a peritonitis, a purgative had been given. A few cases of this kind soon gave me an appreciation of the view that purgatives are not indicated in such cases. About that time the question began to be mooted in medical circles whether the treatment of peritonitis by purgatives or laxatives was the wise one; whether it was not better to confine the bowels, to prevent their moving and hence the exhibition of opiates was advocated, and out of that, probably, grew the treatment of peritonitis by Leonard Carver. I simply present these few facts in illustration of the view that has often struck me, that a great many cases of very mild disease are made more severe by injudicious treatment. Cases that would not be considered to come within the purview of surgeons, are made surgical cases by the want of appreciation of the early character of the case and the use of purgatives to try to move the supposed obstinate constipation. These cases I have seen again and again from that time in my practice; cases of typhlitis, as I called them then, and which I now know to be cases of appendicitis, and which I have treated with poultices and opium, time and time have got well.

Dr. Barbat: With regard to the question as to whether the physician or the surgeon should make the diagnosis, I think that no question of that kind was raised The physician would be just as well able to make the diagnosis as the surgeon, while I think that the surgeon is the best one to determine whether an operation should be performed rather than the physician. With regard to the comparative dangers of operating or not operating, it is about on the same principle as taking the chances of falling off the roof and not getting killed. I have seen patients fall off a roof forty feet high and pick themselves up and walk to the car and go home. It is not a good thing to do though. It is about on the same principle—this waiting in cases of acute appendicitis; waiting to see what is going to turn up. It is better to remove the appendix, even if it is not very badly diseased, and save the trouble of a future attack. With regard to leucocytosis, I mentioned nothing in my paper about that. That is a very good point in cases where there is some question as to the diagnosis, and certainly you can determine whether suppuration has begun or not. It is well to avoid waiting until suppuration has occurred in those cases. The gentlemen who are so much against operating, and who see so much danger in it, are usually those who have seen very little operating done, and have had very little experience in that line, and we find men who have been practising medicine for 20 or 25 years and have never seen a case of appendicitis. They have a great many cases who die of peritonitis and inflammation of the bowels and other diseases with peculiar names. With regard to the cases that Dr. Gibbons mentions, I think you will find that in the majority of cases of appendicitis that turn out badly, we have a foreign body in the lumen of the appendix. These cases are always surgical. As long as there is an appendolith in the appendix, you are in danger, and you can take all the medicine you want, and it does not take it out; you have to take it out, and I don't think that medicine makes it any better or any worse; it might make it worse, I admit that, but it will never make it better, and those cases are always surgical from the beginning.

Operative Treatment of High Degrees of Myopia.—DR. A. BARKAN presented a number of patients who were illustrative of new operative measures undertaken during the last few years in connection with surgery of the head. The first was a case of excessive near-sightedness which had been operated upon with excellent success in one eye. The other eye, which had also been operated upon, is now rapidly recovering. The operation consists in removal of the clear lens of the eye by needling the lens, changing it into a traumatic cataract, and then allowing it to be absorbed within the eye. This has been the course pursued in the case presented. The patient had formerly with the right eye V=15:200 with the strongest concave lenses. Her vision now is equal to 20:50, without any glasses whatsoever, and it has therefore immensely improved. For reading she uses a convex lens of plus 8 diopters, with which she sees smallest print in 15 centimeters. In the other eye the lens is gradually undergoing absorption. This is one of four cases he has operated on thus far successfully; the first one being that of a Dominican sister, where the cataract, a few days after needling, was removed by linear extraction. Not being able to enter into details, it was thought well to bring before the notice of the Society this novel and very promising operative measure for the highest degrees of nearsightedness, which tend to blindness sooner or later.

Foreign Body in Vitreous Removed by Haab's Electro-Magnet.—DR. A. BARKAN also exhibited a patient, a very gratifying illustration of the splendid work done by Prof. Haab's large electro-magnet in removing a metallic body from the vitreous of the eye. He said: The patient was struck in his left eye by a metallic chip, which, entering through a very small opening in the corneosclerotic margin and passed around the lens into the vitreous The initial opening being very small, I preferred to get the foreign body by exposing it to the magnet in the anterior chamber. This was speedily accomplished, the patient experiencing pain for only a second. In the anterior chamber, though, the foreign body became entangled in the iris, and it was necessary to tap the chamber and cut out a small fold of iris, whereupon the foreign body was speedily attracted by the magnet and adhered to its pole. The foreign body was $\frac{2}{100}$ of a grain in weight; had an ugly hook-like shape. The wound healed rapidly and patient recovered sight almost to normal extent. He reads smallest print, sees well at a distance, and under ophthalmoscopic examination —which is a very remarkable point—the lens is seen to be entirely clear, the foreign body having taken its way out around, instead of through the lens. This corroborates Prof. Haab's statement that foreign bodies from the vitreous attracted by the magnet into the anterior chamber, will always go around the lens instead of through that body. This case is one of five which have been successfully removed by Haab's magnet within a little over a year, and which have been published in the *Archives of Ophthalmology* more extensively.

Mastoid Operations with the Use of the Dental Engine and Burr.—DR. BARKAN also presented two cases, representations of extensive mastoid disease operated upon by the method of Prof. Macewen. He said: Since that surgeon's visit to our city, nearly 20 cases have been operated upon, all without a single loss through death, or even a single case of permanent facial paralysis. In every case the so-called radical operation was performed; that is, all the cavities of the temporal bone, the antrum of the mastoid, the cavity of the tympanum, the epi-tympanic cavity, and the osseous part of the external meatus being thrown into one large cavity, thus allowing of thorough removal of all diseased bone, granulation tissue, pus, and cholesteotoma. The young lady, who has made a perfect recovery, was put into my hands by a colleague who was unable to operate upon her, being obliged to leave for the country. During the process of the operation the lateral sinus was exposed, and in removing dead bone a place at the base of the brain, about the size of a nickel, was found to be the site of an epidural abscess. The patient has had no pain or fever, and even enjoys a limited amount of hearing with that ear. Prof. Macewen's instruments were shown. The use of the burr, with entire exclusion of the chisel, is advocated. With this instrument, and entering the antrum through Macewen's triangle [*vide* MEDICAL TIMES, vol. x, p. 668], in every case operated upon, the antrum has been reached directly, easily, and safely. The speaker said he had had very extensive experience in the use of the chisel, both in his private practice and during two extended visits at the clinic of Prof Schwartze, in Halle. He does not hesitate to urge the many advantages of the use of the burr over the chisel, not the smallest of which is that any shock to the head in operating is entirely excluded.

DR. P. M. JONES: There is not much question about the utility of an exceedingly large magnet for removing portions of metal from the eye. I think that does not admit of discussion. The only thing that does admit of discussion is the magnet. I recently had the pleasure of designing for construction a rather large magnet that gave still greater range than the magnet used by Haab. The four connections are such that when it is connected in series, the power is, I think, about equal to the Haab magnet in series. One section of this magnet is almost as strong as both sections of the Haab magnet, when connected and multiplied, and when the two sections are both connected in multiple, it has almost exactly twice the pulling strength of the other magnet. As Dr. Barkan suggested, unless very carefully used, it may be a disadvantage rather than an advantage, because, taking, for instance, a case that he reported this evening; an eye placed half an inch in front of this magnet, with a particle of steel of the size of that withdrawn by Dr. Barkan, it certainly would have gone right through the iris, tearing it to pieces, and then gone through or almost through the cornea. I have seen a small piece of iron go almost through the cornea, having torn the iris all to pieces with this large magnet. But the strength can be graded and used very carefully. One advantage in increased strength is the availability for small particles. If you find that, say, half the strength of the magnet does not bring some result within a reasonable time, it is fair to presume you have a very small fragment, and in that case the greater the strength of your magnet, the more efficacious it will be, because, at 10 millimeters distance from the magnet, that is, the cornea being 10 millimeters distant from the point of the magnet, a piece of steel which is like the head of an ordinary sized needle, being broken off the same length as the diameter of the needle, would come very reluctantly, if it were in the posterior part of the vitreous. If it were in the anterior portion or in front of the lens, or just behind it, it would be another matter. I have been able to get them by moving the eye in different places. Those eyes I speak of were all hogs' eyes, used in making tests on this magnet. I found that the foreign body could be loosened and brought forward. but it would require moving the eye first one way and then the other, and it was a tedious matter, but they could generally be brought out. This magnet was made in San Francisco. You have heard so much lately of trades' unions and tariff, and so on, it might be well to remark that the same magnet can be made here for about $160 to $175, and I believe the Haab magnet costs in Germany 500f., that is $100, so that the duty and transportation being considered, it would be about the same thing.

SAN FRANCISCO MEDICO-CHIRURGICAL SOCIETY.

Regular Meeting, February 7, 1898.

The President, F. B. CARPENTER, M.D., in the Chair.

DR. CLINTON CUSHING read a paper entitled "A Report of Two Cases of Cholelithiasis at the Lane Hospital." [*Vide* MEDICAL TIMES, vol. xii, p. 121.]

DR. L. C. LANE: I saw the operation on the first case. It was extremely difficult. The gall bladder was small and adherent to the liver. It tore somewhat in being removed from this attachment. The bleeding was hard to control also, but it was finally stopped by making a large black eschar with the thermo cautery. The man is now well. There was no rise of temperature after the operation. The diagnosis was in doubt; the case had the appearance seen in malignant diseases, and the pain seemed characteristic of it. The physician who first saw the case made a diagnosis of cancer of the liver. When a student, fifty years ago, I saw my first case of gall stones; and as I stand here now I can see that strong, robust old farmer rolling and writhing about the floor in his pain. The pain is probably the most intense of any disease. The mucous membrane of the gall duct is in folds, and is similar in arrangements to the Archimedian screw. This is claimed by some to be a means of facilitating the passage of bile through it. I well remember the day that I first heard this teaching. It was in a lecture by Dunglison. When he reached this point in his discourse about the Archimedian screw arrangement, he said "then the bile passes," "then the bile passes," "then the bile passes," repeating the sentence in a confused way over and over again, and then, apparently realizing that his mind was lost, he said, "gentlemen, we will consider this at another time," and suddenly left the room.

Dr. J. O. Hirschfelder: In the case described it would seem impossible to make a diagnosis; the atrophy of the gall bladder and the absence of icterus tend to confuse ideas; and the sallow look of the patient would also have a tendency to lead one astray. The typical cases present no difficulty in diagnosis. Internal abdominal pains, mainly in the right hypogastrium, but not clearly localized. (A case of pain in the right side may produce pain on the left side.) The characteristic symptom is icterus, occurring about or within twelve hours after the onset of pain. No other conditions will produce icterus so rapidly; and the reason is that on account of obstruction, pressure in the gall bladder rises and forces a more rapid absorption of bile into the blood. Between the attacks, by palpation, the stones may sometimes be felt. The stones may not be found in the stools until four or five days after the pain ceases. I direct that the contents of the chamber be mixed with water, then well stirred and thrown upon an ordinary flour sieve, and held under a running stream of water until all the material has been washed through, when the stones, if present, may be collected. If but one is found and it is triangular in shape, there are probably others not yet discharged from the intestine. In one week I have collected from a single patient 56 such stones. The treatment need not necessary be surgical. The object of the treatment should be twofold: (1) Increase the secretion of bile by administration of benzoates and salicylates. (2) Induce contraction of the gall bladder if possible, by the administration of pilocarpine, by deep massage, and by the faradic current with slow interruptions. I have seen results of value with this latter method.

Dr. G. R. Hubbell: Some time ago a patient came to me complaining of vomiting and of pain in the abdomen immediately after eating. There were no other symptoms, and the only sign, a tumor in the region of the pylorus. Examination of the stomach contents showed a full stomach several hours after eating. The percentage of H. C. L. was normal. A diagnosis of tumor of the pylorus was made. At the operation a short time later, a stone was found in the common bile duct, but not occluding it. The wall of the gall bladder was greatly hypertrophied and the stone had to be dissected out of the duct.

Dr. E. Rixford: In Dr. Hubbell's case it was easy to get into the duct with a probe and reach the stone, but it could not be moved. By placing a finger in the foramen of Winslow and lifting up, the stone was dug out of the wall of the duct in which it was embedded. The duct was closed with Lembert sutures. There was incessant hiccough for five or six days; otherwise no trouble during convalescence.

Dr. Lane: In 1854, when an interne, a woman came into my ward with a tumor of the liver. It was, in accordance with approved practice at that time, poulticed and finally opened, when a gall stone the size of a pigeon's egg was evacuated. After about three months the woman began to improve, leaving behind her a legacy of gall stones amounting to nearly one hundred, at the time she was discharged.

Dr. Cushing: The study of this class of cases has proven to me three things of importance: (1) The pain is not so much in the region of the gall bladder as in the abdomen generally. (2) The gall bladder is not necessary to the life of the individual, although Bouchard says we secrete as much bile as urine. (3) Where there is an inflamed and ulcerating gall bladder, we may have a low continued fever lasting for months.

Dr. C. V. Cross inquired whether the X-ray revealed the presence of gall stones.

Dr. Rixford: In Dr. Hubbell's case it did not do so. Gall stones are organic. In the radiograph the liver makes a deep shadow, the spine shows well above and below, but the site of the stones could not be distinguished from the liver shadow.

The President: I have tried to get a plate by having the rays obliquely arranged so as to get as little liver substance as possible intervening, but the results were failures to locate the stones, although they were present at the operations. Gall stones placed on the outside of the body did not show any shadow.

Excision of the Tongue at the Hyoid Bone.—**Dr. E. Rixford** presented a patient whose tongue had been removed at the hyoid bone for malignant disease. Kocher's method had been used. Its advantage is the wide field that is opened by the incision. A preliminary tracheotomy had been performed, followed by the ligation of the lingual arteries on both sides of the neck. Very little sloughing had followed the operation.

Oxytuberculin.—**Dr. E. Rixford:** I wish, also, to report a case of pulmonary tuberculosis cured with oxytuberculin. I regret that I cannot also present the patient. The lady is very enthusiastic over the remedy, but did not wish to come before the Society. She is about 30 years of age. Several members of the family have died from tuberculosis; in 1896 she nursed her sister who died from it; the girl was sick about three months. It was a virulent case, one of the most rapid cases I have ever seen. Soon afterwards she herself became ill, and came to me in April, 1897. This note was made at the time: Both apices slightly dull. Bronchial breathing in both; coughing is constant; night sweats; exhausted; gradually losing weight; temperature 99° to 101° F.; sputum, large amount and swarming with bacilli. I prescribed creasote and whisky. I wanted her at the time to submit to Dr. Hirschfelder's remedy, but she did not desire it. She went to Auburn, Placer county, and stayed there a number of months, gradually increasing in strength, and gained a good deal; in October last she returned to San Francisco. Her cough, however, was very severe; sputum contained pus; I examined it three times, but found no bacilli. Night sweats were still present. In going up stairs she puffed a good deal, and complained of great shortness of breath. Although she was considerably improved, she began treatment with oxytuberculine, beginning with injections of 3 centimeters, gradually increasing to 10; in all she has used 500 cubic centimeters. Ten days after the first injections she caught cold and was very blue about it, but yet was feeling better and was determined to continue; she soon began to improve; in two weeks she noticed that her coughing was less; in December there was no sputum whatever. By January first she had no cough, no night sweats, and could run up stairs like a girl of 16; she takes long walks. The other day she walked ten miles. January 16th the injections were stopped and she was discharged as cured. I simply report this case thinking that it is right that all such cases, treated by this remedy, should be reported, in order that we may add to our clinical experience with this remedy. Of course this was a case not very far advanced, but I should say she might very well go into the second stage, and with the tuberculosis in the family history, the chances of recovery were against her. She is reported as cured. There has been no return of symptoms in this time; while I cannot report her as permanently cured, I shall watch the case with considerable interest, and in case there is any recurrence I will take pleasure in reporting to the Society.

Dr. G. R. Hubbell: In connection with the case which Dr. Rixford has described as cured, I wish to report 4 cases treated with oxytuberculine, which are much improved. *Case 1.*—Mrs. M. D——, aged 43. Came to my office November 13, 1897. Her history is as follows: No family history of phthisis. Patient caught cold in January, 1895; since then has been coughing and expectorating. From March until June, 1896, had night sweats: none since. She has had several small hemorrhages and is short of breath on the least exertion; vomits every morning; weight in health 135, at present 112. On physical examination the right apex was flat to the fourth dorsal vertebra—the left to the third. Anteriorly the right was flat to the second rib and the left to the third rib. There was amphoric respiration and bubbling rales in both apices. The sputum contained a large number of bacilli. Temperature—A. M., 100°; P. M., 103° F. Treatment with oxytuberculine was commenced at once in daily injections of 10 c.c. At the end of a week the temperature was A. M., 99°; P. M., 102°. She was able to walk up two flights of stairs without stopping, which she could not do when she began treatment. Her cough is better, her expectoration less, and she retains her food without any discomfort. She returned to her home and I heard nothing further of her. *Case 2.*—Miss J. R——, aged 30, who first consulted Prof. Lane, came to me on November 9, 1897, with the following history: One maternal aunt died of phthisis; one sister died of what was called consumption of the bowels; patient had the usual diseases of childhood, was otherwise well until December, 1896, when she caught cold and began to cough; this has continued since and has been attended with profuse expectoration, blood tinged at one time. In April patient had night sweats; at present she is dyspneic on exertion. Patient is a poorly developed, illy nourished, pale individual; cervical glands slightly enlarged; thorax moderately long, broad, moderately arched, deep. Both supra and infra clavicular fossæ sunken. Left side moves more than the right. Flatness of the right apex posteriorly to the third dorsal vertebra. Flatness of the left apex posteriorly to the second dorsal vertebra. Flatness of the right apex anteriorly to the second rib. Flatness of the left apex anteriorly to the second rib. Amphoric respiration over the right apex with constant rales. Bronchial respiration over the left apex, rales in various parts of the right lung. Otherwise the physical examination was negative. Sputum contained a large number of bacilli. Morning temperature 100°, evening 102°. Since November 9th she has had daily injections of 10 c.c. of oxytuberculine. At present she is working nine hours a day, and she coughs and expectorates very little. She has gained one pound in weight, her temperature is normal, and she states that she feels well. *Case 3.*—Miss H. L——, aged 20. First saw the patient on April 12, 1897. One sister died of phthisis: Patient was well until three months ago, when she caught cold and has been coughing and expectorating since. Her weight in health was 138 pounds; on April 12th it was 127. Physical examination—Patient is a well developed, well nourished, pale individual; thorax well formed, left side moves slightly more than the right on respiration. Dulness of the right apex to the second dorsal vertebra posteriorly, anteriorly to the clavicle. Dulness of the uppermost portion of the left apex. Bronchial in and expiration of the right apex. Bronchial expiration of the left apex. Sputum contains a large number of bacilli. Temperature A. M., 100°; P. M., 102.4°. For the period of one month she received daily injections of 10 c.c. of oxytuberculine; at the end of that time her cough and expectoration had diminished, her night sweats had ceased, and she felt well enough to discontinue treatment. *Case 4.*—Mrs. R. M——, aged 43. No heredity. Patient was well as a girl, but would always take cold easily. In June, 1892, she came to this city and took a room previously occupied for a number of years by a tubercular patient. The house was very dirty and required a great deal of sweeping and cleaning. On November 13, 1892, about six months later, she gave birth to her first child. Three weeks later night sweats commenced, and about six weeks after she began to cough and expectorate. She gained no weight subsequently, but cough continued off and on until three weeks ago, since which time it has been much worse and has been attended with profuse expectoration, pain in the right side of the chest, and dyspnea on exertion. Physical examination—Patient is a moderately developed, well nourished, slightly cyanotic individual; cervical glands slightly enlarged; thorax moderately long, broad, moderately arched, deep; right side moves slightly less than the left. Dulness of the right apex, posteriorly to the second dorsal vertebra of the left to the first. Dulness of both anteriorly to the clavicle. Over the anterior part of the chest the percussion note is hyper resonant. The upper border of the liver dulness is at the seventh rib, and the lower border of the lung moves but little on deep respiration. Bronchial respiration of both apices with mucous rales; over other parts of the lungs the respiration is somewhat prolonged, and over the right lung numerous rales are heard, with a faint friction sound over the left lobe. The sputum contains a large number of bacilli. Temperature A. M., 99; P. M., 100. Since then she has had daily injections of 10 c.c. of oxytuberculine. In the beginning she raised about 16 ounces of sputum in 24 hours. At present she coughs a little in the morning and occasionally during the day, and raises about 1½ ounces of sputum in 24 hours. She has gained 6½ pounds in weight and is not short of breath on exertion. She recently ran four blocks to catch a train without the slightest discomfort. In passing I might mention another patient who was far advanced in consumption, being confined to her bed and short of breath even when at rest. At the urgent solicitation of her friends and relatives and against my wishes, I treated her. Her improvement is marked, her color is much better, and two days ago she was able to go down town. All the cases here reported had been treated with the usual remedies for phthisis, *e. g.*, creasote, codliver oil, etc., without any benefit. During the treatment these were not discontinued. With the exception of one, all were well advanced, and yet they are improved, and two are well on the road to recovery. I have had the satisfaction of observing the cases cured by the use of oxytuberculine, and not only was the cure an absolute one, but none so far have relapsed. In the so-called cures of creasote and various other remedies that I have examined, there remained some faint trace of the disease, some smouldering ember ready to be fanned into a flame at the slightest deviation from health, but after cure with oxytuberculine, all pathological breath sounds disappear, and the respiratory sounds are vesicular.

DR. C. N. ELLINWOOD: I would like to report a case I have treated for eleven weeks. A girl, 27 or 28 years of age, who came to me November 16, 1897, in the fourth stage, according to Dr. Hirschfelder's classification, dyspnea at rest. She had hemorrhages with persistent coughing and profuse expectoration, and this had existed for about two years. She had been a delicate girl through childhood and the menstrual function had not been established until quite late and then very seldom, and not at all for the past six or seven years; she was emaciated and weighed about one hundred pounds. The left side of the chest was much flattened and the lung contained a large cavity. The vesicular murmur was heard only at the base. The right lung was dull at the apex, vesicular murmur inaudible. The sputum was loaded with bacilli. I took the case only as an experiment, and commenced with the daily injection of 60 minims, increasing it gradually to 180; she has had these daily now for eleven weeks; in the beginning she had to be aided in ascending a flight of stairs, while now she walks up stairs readily; she walks fifteen blocks easily. Her coughing has disappeared for the most part, coughing only at intervals of four or five days; when she coughs, which is principally in the morning, she expectorates probably four or five drachms of sputum. During the intervals she has scarcely any sputum, and very slight coughing. The left lung is entirely flattened, and there is very little tissue left, for there is an immense cavity there, which in the intervals accumulates this sputum, which she expectorates, and she is then relieved for the coming week. Her night sweats have disappeared for the most part; she has an occasional slight sweat at night; her complexion has wonderfully improved; this was observed after the first ten days and remarked upon by her friends; her appetite has also improved; she relishes her food and eats three or four times as much as before treatment was commenced An interesting observation was made by her sister, a large, robust girl, who sleeps with her. She used to count her sister's respirations as compared with her own, and the invalid would breathe three times to her once. That great difference has gradually decreased; after the first six or eight weeks her sister only breathed twice to her once, and now she breathes only only one and a half times to her once, which indicates the marked improvement in the respiratory function. The right lung is the one she breathes with for the most part; very little action takes place in the left, yet respiration is becoming more and more prolonged. Her weight has fluctuated very materially; she would gain three pounds in one week, and then a digestive disturbance occurs, and she drops off again, but still she is heavier than when she began. She is cheerful now, while before she was despondent; all in all she is very much improved by the oxytuberculine treatment. The bacilli have not disappeared, although, from a recent examination, I am satisfied they have notably diminished. I know of no remedy, I know of nothing else that has been presented, that would give as great relief to an advanced case as is shown in this instance.

Dr. Geo. K. Frink: Two years ago I saw a case of a man who was in such a condition that he could not work; he was a sailor, and lived around a sailor boarding house; he asked me to get him into the City and County Hospital, and I did so. Dr. Hirschfelder took him under his charge; he was in the hospital about one year—the doctor has pronounced him cured I have not examined the man physically,. but he is now up at all hours of the day and night, and seems to be perfectly well. On the day Dr. Hirschfelder exhibited his cases before the State Society, this man was one of those shown as cured; when I sent him to the hospital I did not expect to see him alive again. In fact, I sent him to the hospital to die.

Dr. Chas. V Cross: I remember the case just mentioned. When admitted to the hospital it was in the third stage. Dr. Hirschfelder said he would like a better grade than that case for experiment; he shook his head as though he was not expecting much from the remedy. I noted the large number of bacilli of tuberculosis in his sputa, and watched him during six months of steady improvement under oxytuberculine. A few months after Dr Hirschfelder announced his remedy, I got a case on which I tried creasote, whisky, everything I knew of; the man lived on Telegraph Hill; he complained that the hardest part of the treatment was getting back home from my office. He had not been able to take the treatment on account of the expense, but I prevailed upon him if he could get sufficient means, to try a few bottles. Before the second bottle was gone (about 180 c.cm) he said he was much improved; I did not ask him about his symptoms, but in order to avoid suggesting anything, waited for him to tell me; before the last bottle was gone he came in one morning and said he had walked right straight home, and he lived on the top of Telegraph Hill. The improvement in strength is more than psychical. I remember that when I went to see him previously, I stopped several times on the way up that hill. Improvement in general strength is a characteristic effect of oxytuberculine.

Dr. L. C. Lane: There is a point I would like to make in this discussion, and that is that these injections never cause abscess. In my cases and those which I have observed, I have seen no abscess or any considerable pain, beyond the simple puncture of the skin by the needle; sometimes a little slight pain is complained of, but by massage upon the point of injection, that disappears. I have seen none of the inconveniences from the puncture that some have complained of.

Dr. W. F. Cheney: I have had several cases that I have treated with oxytuberculine, and one of these has given positive proof of, at least, an improved condition. He was well advanced in tuberculosis, with the upper third of one lung gone, bacilli in the sputum, and the patient in a pitiable condition. He had been aware of the existence of tuberculosis for two or three years. He had been under treatment by some of our well known physicians by the usual methods; the last treatment being creasote in large doses. This man began treatment with oxytuberculine in doses of 3 c.c., gradually running up to 20; he agreed to try it for one month, though I was skeptical of curing him. At the expiration of the month he thought he was better, and he really had less dyspnea. His expectorations were easier and he was generally improved. I was not much encouraged by the improvement; furthermore, I wanted to make a test of the treatment, and to find out what had helped him. I then gave him codeine for the cough, and a mixture of codliver oil, and told him to go a week without oxytuberculine; during that week he was not doing as well as before; still I was not satisfied, and would not put him back upon the other treatment, but said, "Go on with your codliver oil, and see if you do not feel as well as you did." In three days more he returned again and said that he must have oxytuberculine or he thought he would die. He was becoming very despondent, was coughing almost constantly, and at his urgent request I returned to the original treatment. Within a week after he was much better; he now sleeps all night, and can walk about town without the exhaustion he formerly experienced. I cannot convince myself that that man can be made well, but he has been made comfortable, while without the treatment he was practically worthless, and extremely miserable. This is a demonstration that is practically beyond dispute, and it is not due to anything but oxytuberculine, for he went ten days with other medicines and was anything but improved until the oxytuberculine was resumed.

Dr. J. O. Hirschfelder: I am very glad to hear these reports, especially because the cases are, nearly all of them, so far advanced. I have made distinct claim to only the first and second stages, namely: Before there is any shortness of breath on exertion. But as these gentlemen have found, so I find, in very advanced cases, very marked improvement occurring, and in some far advanced cases, complete recovery from all symptoms, disappearance of the bacilli from the sputum, and the return of the patient to perfect health. In these advanced cases where cavities are present, the cavity does not disappear; whenever I have found large cavities I have continued to find them, although the cavities become smoother walled. In some cases the bacilli have disappeared from the sputum, the patient has lost the fever, strength has returned, there has been a gain in weight, and results have been shown such as we might expect from iodide of potassium in syphilis. I might cite many cases, confirmatory of the observations of the gentlemen who have just spoken; but I will merely call attention to a striking case illustrating what may be done in a field heretofore most disappointing: J. A——, aged 34; a tailor; was admitted to hospital July 15, 1897, with the diagnosis of miliary tuberculosis. Dulness of the right apex was found to the second dorsal vertebra, with bronchial respiration. The sputum contained large numbers of bacilli. The urine, 32 ounces in quantity, with a specific gravity of 1016, was bloody and contained abundant bacilli in groups. The patient reported that he had been taken sick one week before, and that he had become short of breath and weak. He was found to have general anasarca. His fever was high, ranging to 104° F. Injections of oxytuberculine were given and a rapid improvement in his condition took place. On August 12th he reported that he felt better, and thought he could breathe easier. His appearance was brighter. The edema soon disappeared. August 17th he got up and walked about the ward. The urine no longer contained blood, nor bacilli were found, but the picric acid test showed a slight deposit. The fever had become lower, and on September 10th the temperature was normal. Since November 14th there has been absolutely no elevation of temperature. The weight of the patient has risen from 133 pounds on August 28th to his present weight of 149 pounds. No bacilli have been found in the sputum since December 30th, and for two months past, there has been absolutely no cough. Examination of the lungs fails to reveal the slightest sign of trouble. The urine is clear, although with Esbach's fluid a trace of albumin can be found. The patient's appearance is that of ruddy health, and he may be considered a case of cured miliary tuberculosis.

REVIEWS AND NOTICES.

The Surgical Complications and Sequels of Typhoid Fever. By Wm. W. Keen, M. D., LL. D., Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College, Philadelphia, Vice-President of the College of Physicians, Philadelphia, etc. Based upon tables of 1700 cases compiled by the author and by Thompson S. Westcott, M. D., Instructor in Diseases of Children, University of Pennsylvania, Visiting Physician to the Methodist Episcopal Hospital, Philadelphia. With a chapter on the "Ocular Complications of Typhoid Fever." By George E. De Schweinitz, A. M., M. D., Professor of Ophthalmology, Jefferson Medical College, Professor of Diseases of the Eye, Philadelphia Polyclinic, etc. And as an Appendix, "The Toner Lecture," No. V. Philadelphia: W. B. Saunders. pp. 382. Price, $3.00 net.

This is a well written and handsomely illustrated book of 382 pages. Its publisher has presented it in his best style, which is always meritorious. The subject is an attractive one, which, curiously enough, has never before been so exhaustively treated. The main features of the book are found in the author's reflections upon typhoid gangrene, typhoid affections of the joints, bones, cartilages, and, naturally enough, of the intestinal tract. The greatest interest of the volume centers in the latter topic, involving, as it does, treatment of bowel perforations in the course of typhoid fever. In this connection the author has performed a most useful task, and his conclusions and generalizations will, in great measure, control the management of this unfortunate condition for a long time to come. It is fortunate, both for science and the afflicted, that this work fell to the lot of so able and experienced a surgeon as Dr. Keen. Appended to the volume is the author's well known and valuable Toner (Smithsonian) Lecture, on "The Surgical Complications and Sequels of the Continued Fevers."

MEDICAL NEWS.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific) from February 20, 1898, to March 20, 1898.

The following named medical officers are relieved from duty at the Army Medical School in this city, to take effect upon the completion of the course at the school ending April 1, 1898, and ordered to take stations as follows: First Lieutenant Henry Page, Assistant Surgeon, Presidio of San Francisco, Cal.; First Lieutenant George Rauchfuss, Assistant Surgeon, Fort Apache, Arizona

By direction of the President, Major William C. Shannon, Surgeon, will, upon the expiration of his present sick leave of absence, report in person to the President of the Army Retiring Board at San Francisco, Cal., for examination by the Board.

Leave of absence for four months, with permission to go beyond sea, to take effect on or about March 15, 1898, is granted Lieutenant Colonel William D. Wolverton, Deputy Surgeon General, Chief Surgeon, Headquarters Department of the Columbia.

Captain Paul F. Straub, Assistant Surgeon, ordered to accompany Companies A and G, 14th Infantry, to Skagaway, Alaska, and there take station

First Lieutenant John S. Kulp, Assistant Surgeon, ordered to accompany Companies B and H, 14th Infantry, to Dyea, Alaska, and there take station.

Official List of Changes in the Medical Department U. S. Navy (Pacific Station) from February 20, 1898, to March 20, 1898.

Passed Assistant Surgeon F. A. Helser detached from the "Baltimore," ordered home and granted two months' leave.

ITEMS.

Dr. L. P. Hall has removed from Petaluma to Dixon, Cal.

Dr. C. E. Thompson has removed from Edgewood to Dunsmuir, Cal.

Dr. A. A. DePuy has removed from Elmhurst to Golden Gate, Alameda Co., Cal.

Dr. E. S. Pillsbury has removed from Palo Alto to 1837 Scott street, San Francisco, Cal.

Dr. C. G. Kuhlman has removed from 923 Market to 423 Ellis street, San Francisco, Cal.

Dr. A. P. Woodward has removed from 21 Powell to 1220 Sutter street, San Francisco, Cal.

Dr. E. A. Trommald has removed from the German Hospital, San Francisco, to Tacoma, Wash.

Dr. A. B. McKee has removed from the Nucleus Building to 533 Sutter street, San Francisco, Cal.

Dr. G. B. Somers has removed from 533 Sutter street to the Press Club Building, 123 Ellis street, San Francisco, Cal.

Dr. Samuel O. L. Potter has removed from the Mills Building to the McNutt Building, 1220, Sutter street, San Francisco, Cal.

Dr. B. S. Nourse has removed from Franklin to Sacramento, Cal., where he at present occupies a position in connection with the Railroad Hospital.

Dr. T. W. Serviss has opened offices at 928 Van Ness Avenue, San Francisco. He will confine his practice to diseases of the eye, ear, nose and throat.